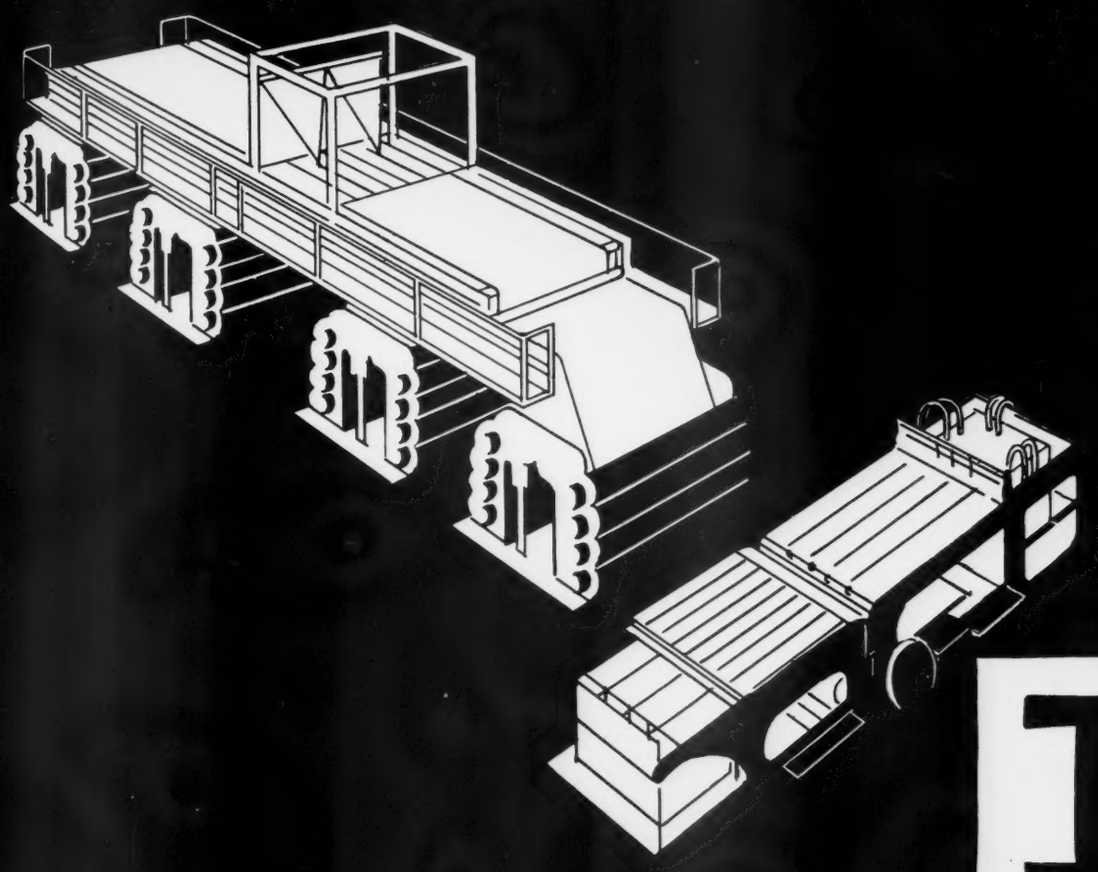
PRINTING EQUIPMENT ENGINEER



A TECHNICAL PUBLICATION FOR PRODUCTION AND MECHANICAL EXECUTIVES IN THE GRAPHIC ARTS INDUSTRY

To Insure the . . .

. . . . . SAFEST MOST RELIABLE AND ECONOMICAL PRESS DRIVES AND CONTROLS, REELS AND TENSIONS, HIGH SPEED PASTERS . . . ALSO PRESS DRIVES AND CONTROLS FOR CYLINDER, OFFSET, ROTOGRAVURE PRESSES AND AUXILIARY MACHINERY . . . . .

Specify Cline-Westinghouse and you will benefit by the advantage of years of practical engineering experience that has so thoroughly satisfied Cline customers.

List of CLINE EQUIPMENT

Cline System of Full Automatic Press Control

Cline Selective Unit Type Drives for Unit-type Presses

Cline System Paper Reels and Automatic Electric Tensions

Cline High Speed Pasters

Cline-Westinghouse Typesetting Drives

Cline Capital Roll Lift and Lowerator

Cline-Westinghouse Mercury Arc Current Rectifiers

Cline-Westinghouse Control for Letter, Offset and Rotogravure Presses

Cline Capital Plate Dropper

Cline Capital Paper Trucks, Tracks, Transfer Tables, etc.

Cline Capital Plate Conveyor

CLINE ELECTRIC MFG. CO.

MAIN OFFICE: 211 W. WACKER DRIVE, CHICAGO, ILL.

Western Office
CROCKER FIRST NAT'L BANK BLDG.
SAN FRANCISCO, CAL.

CLINE SYSTEM

Eastern Office
220 EAST 42nd STREET
NEW YORK CITY

THERE'S NO LAG IN TIME

STAHI
POWER-LIFT FORM FILE
INSTALLATIONS

Phoenix Republic-Gazette
Portland, Ore., Journal (2)
Nashville Banner
Oakland, Calif., Tribune
Salt Lake City Tribune-Telegram
Columbus Dispatch (3)
Parkersburg, W. Va., Sentinel
Youngstown, Ohio, Vindicator
Lansing, Mich., State Journal
Portland Oregonian (2)
Washington Evening Star (2)
Syracuse, N. Y., Post-Standard
Houston, Texas, Chronicle
New Orleans Times-Picayune (2)
Portland, Me., Press Herald
Newburgh, N. Y., News
Buffalo, N. Y., Times
Detroit, Mich., News (2)
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Sliding forms in or out of **The STAHI POWER-LIFT FORM FILE,** is a One Minute Operation, by One Man, with very little effort. Any one of 16 forms **instantly available.** The most **Promising Solution** of an over crowded Composing Room. The Praise received for **Form Files** from Publishers all over the country is **extraordinary.**

STAHI NEWSPAPER SUPPLY COMPANY, INC.

417 OREGONIAN BLDG.
PORTLAND, OREGON

1020 CROCKER STREET
LOS ANGELES, CALIF.

538 So. CLARK ST.
CHICAGO, ILLINOIS

Budgetary Control

By L. E. BAUERFEIND*

Writer presents information for formulating composing room expense budget, and tells how operations are carried on under its use.

II

THE third analysis sheet (chart 1) is headed "Direct Labor Expense, 1933" and in the description column are listed the months as previously explained. In the first money column is listed the monthly direct labor payroll for each month on down through the five years. In the second column after heading it "Number of Pages" from the Production sheets enter the number of pages produced opposite each month. Head the third column "Labor per Page." Divide each month's payroll by the number of pages produced that month and enter this quotient in the column. You now know your cost per page for each month of the five years, to date. Because of the seasonal fluctuation in the number of pages produced and consequent variation in page costs this average must be by months. Add the five January page costs together and divide by five which will give you the average January cost. In the fourth column headed "Average Page Cost" enter this sum for each of 12 months. In the fifth column headed "Estimated No. Pages" enter the pages estimated for each of the 12 months in your Sales budget. The sixth column is headed "1938 Budget per Page" and in it is entered the per page budget allowed for each month of the coming year. The monthly average per page costs are taken into consideration along with the data available regarding the expected lineage of advertising and news which constitute the number of pages expected in the sales budget.

*American-Statesman, Austin, Texas

Chart 1.

COMPOSING ROOM—DIRECT LABOR EXPENSE

Month	Monthly Payroll	No. Pages	Labor per Page	
1935				
January	$ 4152.29	572	$7.27	
February	4249.81	578	7.35	
March (5)	5291.27	766	6.90	
*April	4389.80	656	6.69	
May	4378.01	638	6.88	
June (5)	5555.54	798	7.00	
July	4212.88	564	7.47	
August (5)	5362.45	706	7.60	
September	4281.87	588	7.31	
October	4442.31	638	6.94	
November (5)	5518.50	822	6.72	
December	4506.32	680	6.64	
Total	$56346.05	8006	$7.03	+ Average
1936				
January (5)	$ 5250.45	746	$7.05	
February	4299.64	618	6.96	
March	4350.24	658	6.62	
April	4520.38	694	6.52	
†May (5)	5876.34	886	6.68	
June	4908.72	700	7.55	
July (5)	6210.10	904	7.28	
August	4783.03	612	7.81	
September	4884.33	692	7.07	
October (5)	6232.88	888	7.04	
November	4990.30	732	6.82	
December (5)	6231.77	762	8.18	
Total	$62538.18	8892	$7.03	+ Average

(5)—5 weeks. *—Payroll increase from $1.05 to $1.25 hr. †—Payroll increase from $1.05 to $1.25 hr.

BUDGET, 1937

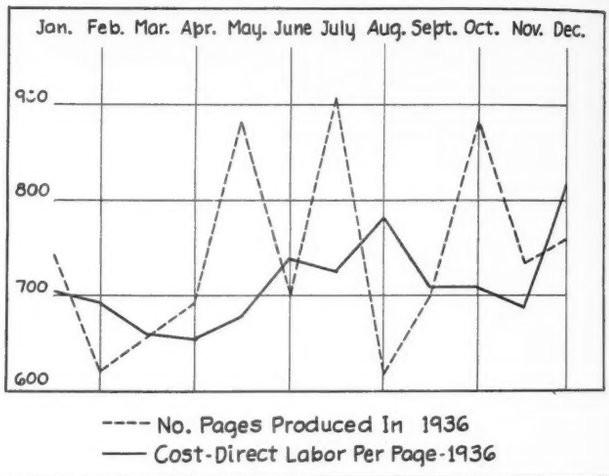
Month	5-Yr. Avg. Labor per Page	Estimated No. Pages	Budget per Page	1937 Budget
January	$7.16	784	$7.03	$ 5511.52
February	7.15	648	7.03	4555.44
March	6.76	690	6.76	4664.40
April	6.60	728	6.60	4804.80
May	6.78	930	6.78	5705.40
June	7.27	734	7.03	5160.02
July	7.37	948	7.03	6664.44
August	7.70	642	7.03	4513.26
September	7.19	722	7.03	5075.66
October	6.99	932	6.99	6514.68
November	6.77	762	6.77	5158.74
December	7.41	794	7.03	5581.82
Total		9314	Avg. 6.93	$63408.18

Labor Costs Don't Vary With Number of Pages Produced

Chart 2 is a graphic representation of "Pages Produced" and of "Per Page Costs" for 1936, drawn from the information contained in Chart 1, which are true figures, and the actual experience of one Texas newspaper. It plainly shows the seasonal variation in both production and costs per page for labor which varied from a low of $6.52 to a high of $8.18 per page. This chart shows that the direct labor cost per page did not vary according to the number of pages produced, *i.e.*,

Chart 2

GRAPHIC REPRESENTATION OF LABOR AND PRODUCTION, 1936



January.....746 pages cost $7.05 per page, while in
December.....762 pages cost $8.18 per page,

still (Chart 1) the annual average was $7.03+ for both 1935 and 1936 although wage increases for from $1.03 to $1.125 per hour were granted during the two years shown.

Volume variance undoubtedly influences per page costs of direct labor. The volume increase of from 8,006 pages in 1935 to 8,892 pages in 1936, a slightly more than 10% gain, undoubtedly was responsible for maintaining the $7.03+ rate in 1936.

Based upon the data in Chart 1, as shown graphically in Chart 2, after applying the principles outlined in

(*Continued on Page 58*)

Looking over a rolled-in dry mat in the plant of the fast-growing Chicago Daily Times

Ludlow lines do stand up under severe dry mat pressure

Under the most severe dry mat rolling-in pressure, Ludlow sluglines have been found to stand up notably well. Many of the most capable mechanical executives are unstinting in their praise of the comfort which this Ludlow feature has contributed to their daily work.

The stand-up qualities of Ludlow sluglines are demonstrated most convincingly in the experience of the illustrated tabloids, which mold dry mats under exceptionally severe pressure, because of the large number of illustrations used in their pages.

Sinks are costly to the daily newspaper running on a close schedule. For sinks require substitution of lines and re-rolling of mats or—worse still—plate make-overs. Such delays are hazardous and expensive.

Ludlow equipment for newspaper display composition offers the best available insurance against such delays and annoyance. In addition, it affords the composing room the ease and speed of all-slug make-up. Well-designed Ludlow typefaces, in a wide variety of modern and traditional designs, prove highly acceptable to readers and advertisers alike.

Write us today for full information on these and many other advantages of the Ludlow to the newspaper composing room.

Set in members of the Ludlow Karnak family

Ludlow Typograph Co. 2032 Clybourn Avenue Chicago + Illinois

INCREASED SEEING EFFICIENCY AT LESS COST!

Shadows are greatly reduced and all details clearly revealed under Cooper Hewitt mercury vapor light. This modern light means better sight and better production – a boon to management and workers alike.

By adding incandescent lamps to the mercury within the fixture, lighting is obtained that closely resembles daylight values for operations that require perception of color.

The detail-revealing light of mercury vapor is now produced at 22% less cost. And, the new unit hangs horizontally to give the best distribution of the soft, non-fatiguing light which its long lamp provides. Starting is instantaneous. Power factor is high.

Get full details about these improved units. They are made in two sizes: 50 inches long operating at 350-watts; 33 inches long using 275-watts. Bulletin 827 DM illustrates their many advantages for you. Write for a copy. General Electric Vapor Lamp Company, 899 Adams Street, Hoboken, New Jersey.

GENERAL ELECTRIC VAPOR LAMP COMPANY

828C

100%
ANTI-FRICTION CONSTRUCTION
PRE-LOADED CYLINDER BEARINGS
END ADJUSTING INK FOUNTAINS
ALL BALL BEARING INKING ROLLERS
SEPARATE DRIVE OF INKING ARRANGEMENT
CENTER ADJUSTMENT OF BOTH FOLDING ROLLERS
BALL BEARING MOUNTED DRIVE SHAFTS
FORCE FEED LUBRICATION
OIL TIGHT HOUSINGS
QUICK PLATE LOCK-UP
REVERSE DELIVERY

LOOK FOR *These Features*

When You're Going to Buy a Press

Don't overlook a single detail in sizing up new press equipment. It's all the more important when you stop to consider that the press you choose must serve your needs for years to come.

So make sure you get every mechanical advantage, every proven improvement in the original equipment. Once installed, even minor changes are difficult and costly. Your decision is more or less final and should be approached well in advance of a pressing need for new units.

The Goss High Speed Anti-Friction Press incorporates advanced design with massive construction. It is endowed with all the standard principles of engineering, plus many exclusive patented features. It is built to attain high sustained speeds with a minimum of wear, friction, and vibration.

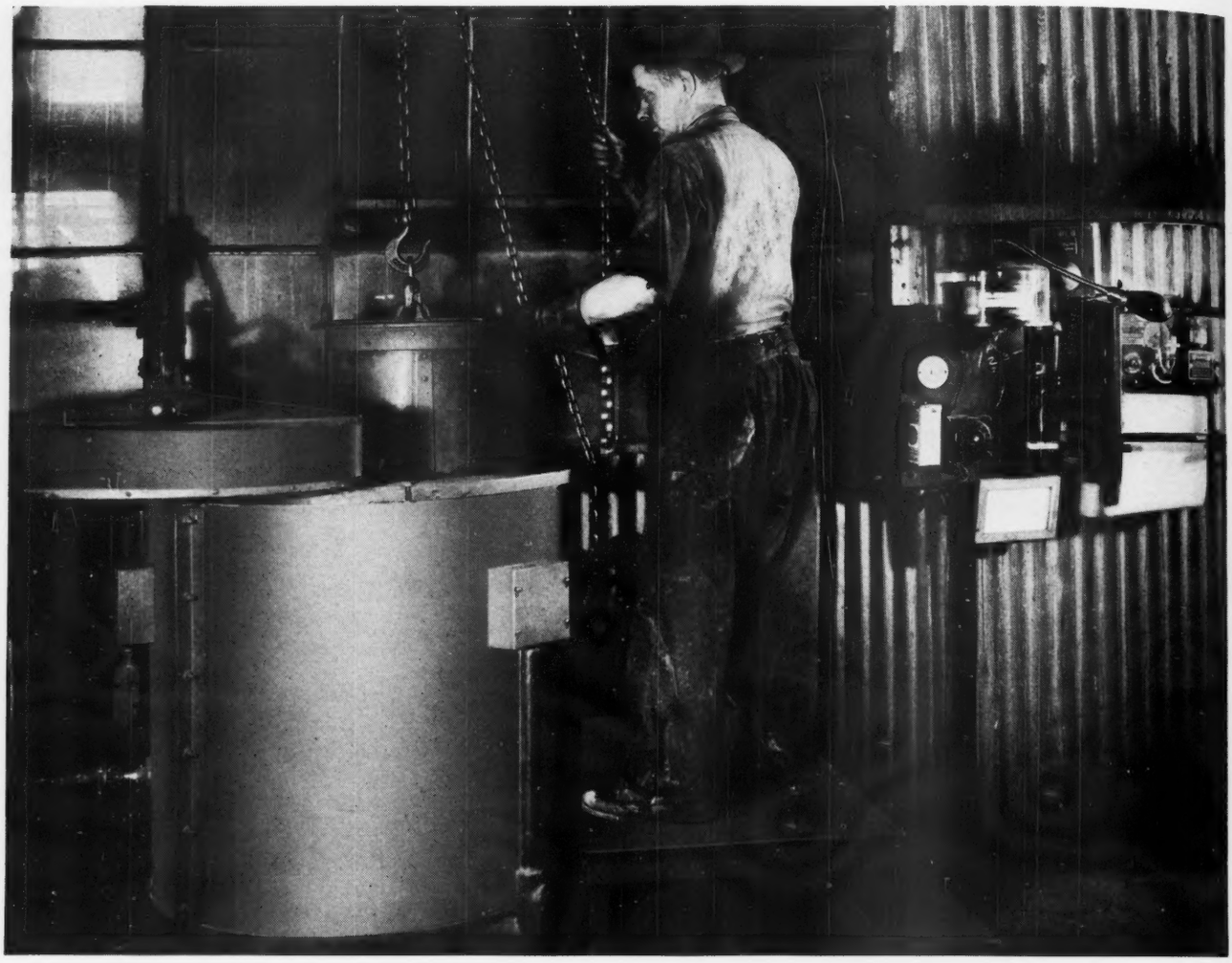
Investigate now. Make careful comparisons, point for point. Check the records of Goss High Speed Anti-Friction Presses in leading press rooms throughout the world. Ask at once for details.

GOSS

THE GOSS PRINTING PRESS COMPANY
PILSEN STATION, CHICAGO

NEW YORK OFFICE: 220 E. FORTY-SECOND ST.
SAN FRANCISCO OFFICE: 707 CALL BLDG.
GOSS FOSTER, LIMITED, LONDON, ENGLAND

EVEN THE HEAT TREATMENT...



...IS *Controlled* BY HOE

The most costly equipment in the above picture is not the tempering furnace which is being loaded... but the set of sensitive instruments at the right. They could be dispensed with, they often are in industrial practice.

Here is another instance of the precision methods practiced throughout the Hoe plant. By consulting the recording instruments, the operator is able to bring the steel to a degree of temper which has been determined ideal for the particular part to be processed.

Add this to the many other extra precautions of Hoe's manufacturing procedure, and it's easier to understand how... "Hoe Builds The Best."

AT THE

S. N. P. A.

MECHANICAL CONFERENCE

See the movie

"GOING TO PRESS"

The new Hoe sound picture tells the detailed story of the making of the modern newspaper with Hoe Arched- and Vertical-Type Super-Production Newspaper Presses, Hoe Super-Production Folders, Hoe Reels, Full-Automatic Electric Tensions and Hoe Full-Speed Pasters.

SEVERAL SHOWINGS EACH DAY

HOE *Builds the Best*

R. HOE & CO., Inc. ***General Offices:*** **910 E. 138th St. (*at East River*) New York, N. Y.**

BOSTON • SAN FRANCISCO • CHICAGO • BIRMINGHAM • LONDON

Printing Equipment Engineer

Trade-Mark Registered U. S. Pat. Office

September, 1937

Volume 54 No. 6

A Monthly Publication

ESTABLISHED 1910

Member of Controlled Circulation Audit

CCA

Published Monthly

AT 1276 W. THIRD ST., CLEVELAND, O.

Eastern Manager:

RUSS BIRCHFIELD, 509 FIFTH AVE., NEW YORK, N. Y. VANDERBILT 3-5191

Western Manager:

E. P. BLOOMSTER, 232 E. ERIE STREET, CHICAGO. PHONE SUPERIOR 2444.

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Contents:

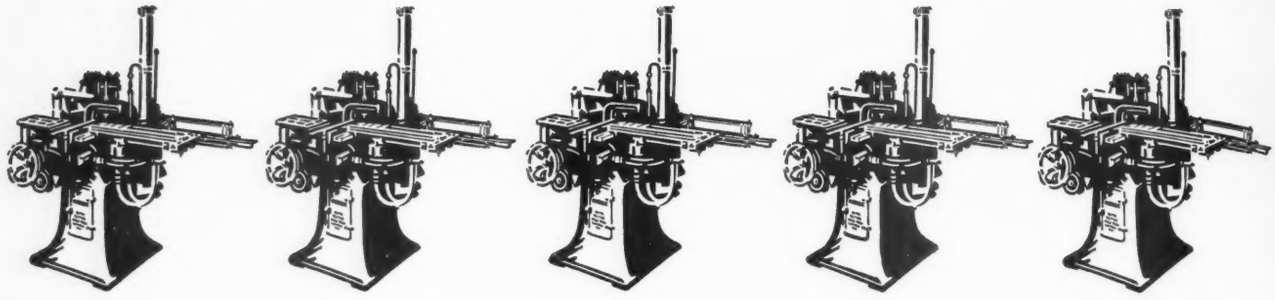
	Page
BUDGETARY CONTROL *L. E. Bauerfeind*	4
EIGHTY PER CENT COLOR *A. G. Fegert*	15
S.N.P.A. CONFERENCE	16
COBB'S COMMENTS CONCERNING CRAFTSMEN'S CONVENTION	18
IT APPEARS TO ME—" *Dry Mat Bill*	24
PHOTO-ENGRAVING CHEMICAL HAZARD TABLE	26
CHEMICALS AND MERCURY *Staff Writer*	28
EGYPTIAN BLUE *Staff Writer*	32
RECENT EQUIPMENT SALES	34
NEW PRINTING EQUIPMENT AND SUPPLIES	36
EMERGENCY LEADER RULE	48
PATENTS	54
TYPOGRAPHICAL GYMNASTICS *Leroy Church*	60
TECHNICAL LITERATURE	65
ADVERTISERS' INDEX	66

A Technical Publication for the Mechanical Executive Responsible for Printing Production, Equipment and Supplies in the Commercial, Magazine, Private Plant and Daily Newspaper Field.

Published by Don Will • Edited by Mac Sinclair

Associate Editors: Ira D. Pilliard, Adam Henry Reiser

STIMULATE THE USE OF YOUR ADVERTISING COLUMNS



Give the buyer of your advertising space the greater selling power of good typography. Make your display advertisements attractive, clear-cut and simple, properly balanced and legible, using appropriate modern type faces in harmony with illustrations and text—to invite reading, hold attention, stimulate the desire to buy and secure action.

Set Display Ads in Single Types

Hand composition of single types stands alone in providing that flexibility in the selection of proper sizes of appropriate type faces and ornaments, and their relation to each other and to the space to be occupied, without which good typography cannot be attained. It has been proved many times by tests made on "live" copy during actual composing room operation that no method of setting display advertisements is so fast as hand work. When type and spacing material cast on the Monotype are available in practically unlimited supply as needed, the best typography is combined with economy in production and maximum speed.

Profit by the Monotype System

The Monotype System, of composition and non-distribution, makes available all traditional and modern type faces now generally used in advertising typography; it provides ample resources to meet "peak" loads and unexpected demands; gives continuous production with a minimum of non-productive time; assures an unlimited supply of new type, borders, rules, leads and slugs at all times; produces the greatest volume of display linage at the least cost. It offers a dependable method of advertising composition, and makes possible complete non-distribution through all operations. Send for portfolio of specimens showing the Monotype Advertising Type Faces.

LANSTON
MONOTYPE
MACHINE COMPANY

Monotype Building, 24th at Locust Street, Philadelphia, Pa.

NEWSPAPERS EQUIPPED WITH MONOTYPES ALWAYS GIVE BEST SERVICE TO ADVERTISERS

Set in the Monotype Twentieth Century Family

For: economical operation
flexibility
speed
performance and satisfaction

DUPLEX UNITUBULAR

40,000 speed per hour.
one plate per page.
any page combination by two, to full capacity.
no collect runs.
removable—interchangeable fountains.
quick lock-up.
quick fold-centering device.
"Tubular" construction and unit design.
color on every page.

Unitubular Presses equipped for color printing now in operation or under construction at Battle Creek, Michigan:

Ardmore, Okla., Ardmoreite
Ashland, Ky., Independent
Austin, Tex., American Statesman
Baton Rouge, La., State Times
Billings, Mont., Gazette
Boston, Mass., Goodman Bros.
Canton, Ill., Ledger
Chicago, Ill., Shaw-Chicago Ptg. Co.
Detroit, Mich., American Pub. Co.*
Huntington, Ind., Our Sunday Visitor
Hyannis, Mass., Cape Standard Times
Kewanee, Ill., Star-Courier*
Lawrence, Kans., Kansas Color Press*
Los Angeles, Calif., Compton Ptg. Co.
Los Angeles, Calif., Rodgers & McDonald
Los Angeles, Calif., Roy E. Shadle
Parsons, Kans., Sun
Ogden, Utah, Standard Examiner
Pine Bluff, Ark., Commercial
Racine, Wis., Journal Times
St. Charles, Ill., Roto Color, Inc.*
Salem, Ore., Capital Journal
Seattle, Wash., Buyer's Guide
Sterling, Ill., Gazette
Syracuse, N. Y., Syracuse Color Press
Toledo, Ohio, Ameryka Echo
Walla Walla, Wash., Bulletin
Waltham, Mass., News-Tribune
Wooster, Ohio, Record
Canton, China, Tiger Balm
Caracas, Venez., La Esfera
Durban, So. Af., Natal Advertiser*
Hong Kong—Tiger Balm
Johannesburg, So. Af., Star*
Manila, P. I., Herald
Montevideo, Uruguay, El Pais
Quito, Ecuador, El Comercio
Rio de Janeiro, Brazil, A Nota
Rio de Janeiro, Brazil, Telephone Co.
San Juan, P. R., El Imparcial

*Unitubular Repeat Orders.

Compare these Duplex Unitubular advantages with those of newspaper presses of any other manufacture, then consider this list of customers who preferred the Duplex Unitubular before you make a new press decision. If you have not already seen this new press in operation we will gladly arrange a demonstration. The Duplex Unitubular is the press sensation of the industry.

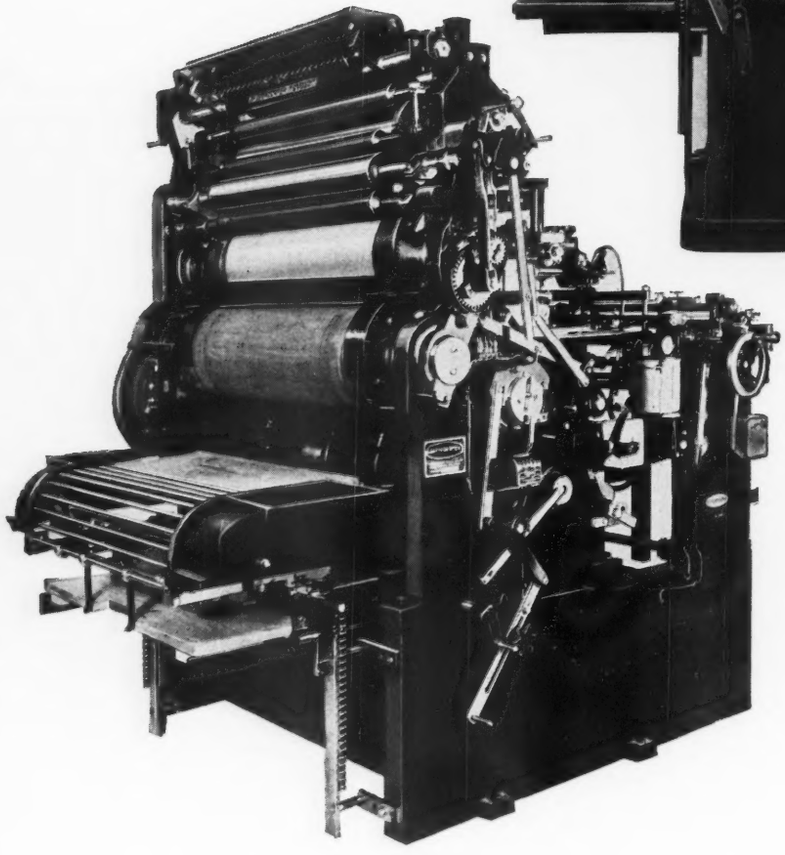
DUPLEX

PRINTING PRESS CO., BATTLE CREEK, MICH.

WEBENDORFER OFFSET

17 x 22

PRICE
$3000
F. O. B. MOUNT
VERNON, N. Y.



22 x 26
OPTIONAL
22 x 29

PRICE UNDER
$5900
F. O. B. MOUNT
VERNON, N. Y.

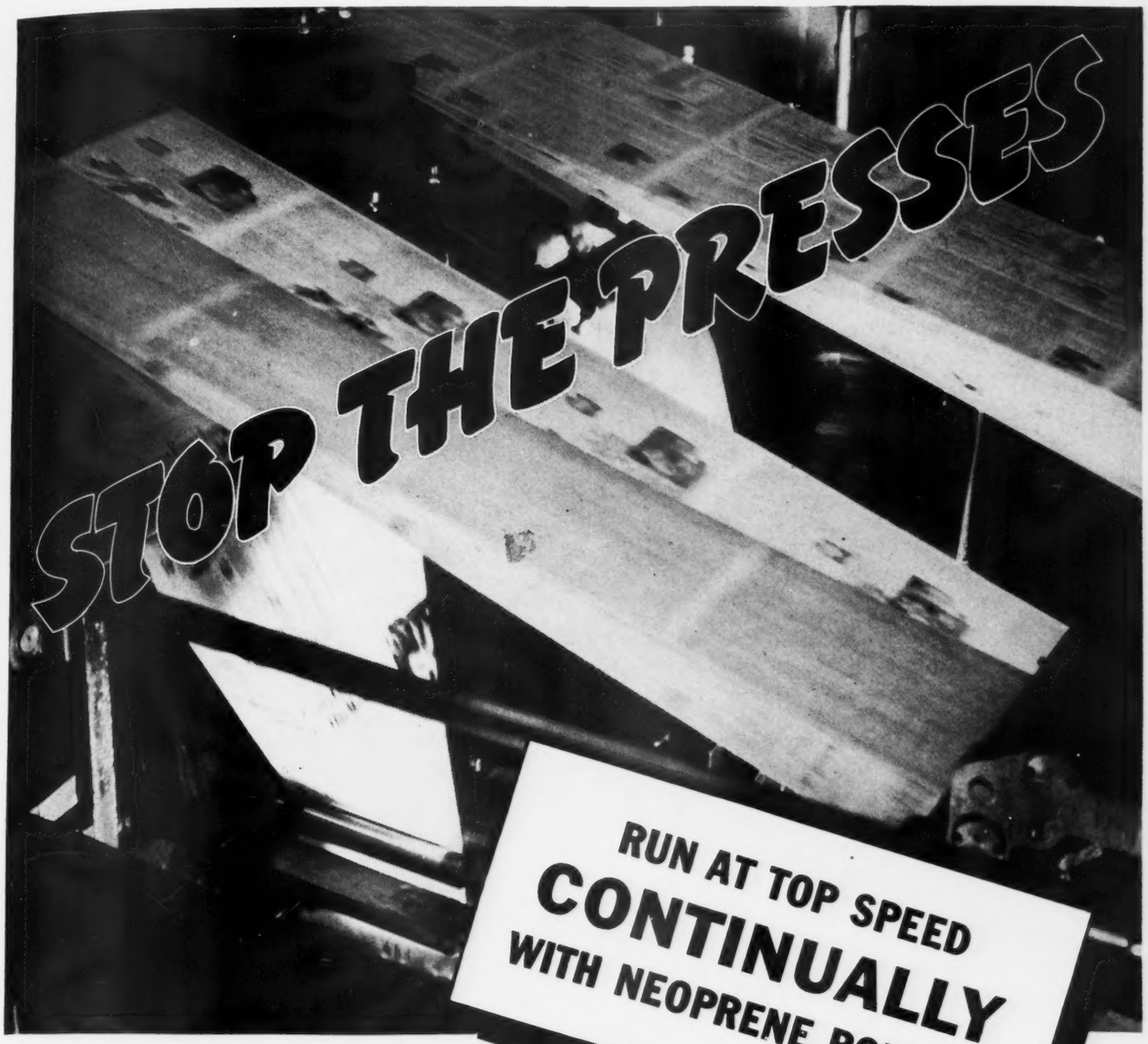
EASIER CONTROL—SIMPLER OPERATION—SPEEDIER PRODUCTION

American made by

WEBENDORFER-WILLS CO., Inc.

Builders of Printing Machinery for Over Thirty Years **MOUNT VERNON, NEW YORK, U. S. A.**

It costs you money to...



SPEED is the byword of modern printing, because speed can meet the demand for lower costs. But costs zoom up when the run is interrupted to change or reset rollers.

With ordinary rollers, centrifugal force causes distortion—heat results in deterioration—changes in humidity necessitate resetting. But neoprene rollers keep their shape at high speeds, at high temperatures, under all variations of humidity.

Ask your regular supplier for neoprene rollers or write to us for a list of manufacturers.

DU PONT
REG. U. S. PAT. OFF.

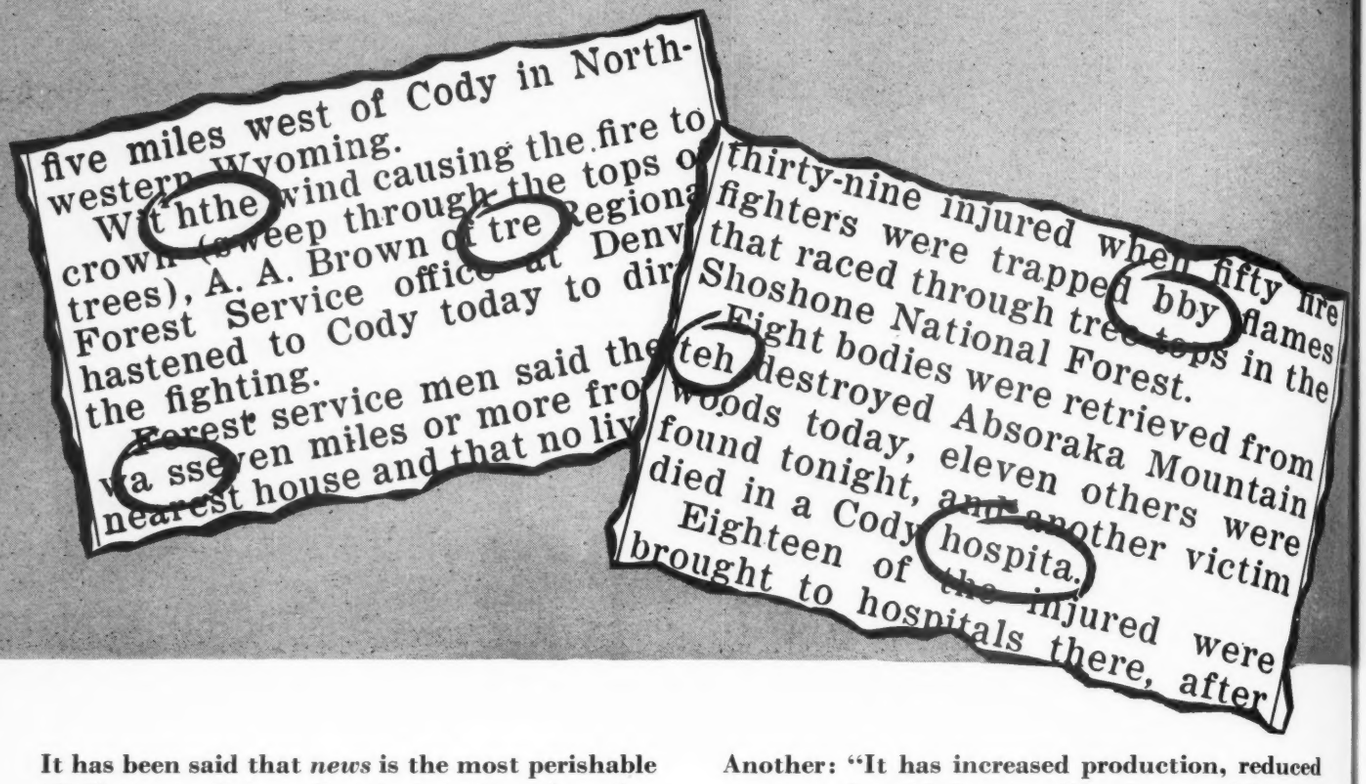
NEOPRENE

(Formerly sold under the trade-mark "DuPrene")

E. I. DU PONT DE NEMOURS & CO., INC., RUBBER CHEMICALS DIVISION, WILMINGTON, DELAWARE

"Railroaded" errors

don't do a newspaper any good


five miles west of Cody in North-
western Wyoming.
With the wind causing the fire to
crown (sweep through the tops o
trees), A. A. Brown of the Regiona
Forest Service office at Denv
hastened to Cody today to dir
the fighting.
Forest service men said the
was seven miles or more fro
nearest house and that no liv
thirty-nine injured when fifty fire
fighters were trapped bby flames
that raced through tree tops in the
Shoshone National Forest.
Eight bodies were retrieved from
teh destroyed Absoraka Mountain
woods today, eleven others were
found tonight, and another victim
died in a Cody hospita.
Eighteen of the injured were
brought to hospitals there, after

It has been said that *news* is the most perishable of all commodities. Certain it is that the value of news depreciates with every minute that passes. Hence the practice of "railroading" late news stories . . . slapping them into the forms while the slug machine metal is still hot, without proof-reading.

Recently we counted seventeen typographical errors in a well-known newspaper's front page . . . and twenty-seven on an inside news page. Think of it! Forty-four possible sources of annoyance to every reader of the paper . . . on these two pages alone . . . and sometimes typographical errors are extremely annoying, as every editor knows.

Black & White matrix contrast service may not completely eliminate errors in railroaded news composition, but it does go a long way toward that desirable end. Black & White user testimony on this point is particularly conclusive. For example, "The Black & White matrices do promote cleaner newspapers—much cleaner."

Another: "It has increased production, reduced errors, and enabled us to railroad news with more freedom during emergencies."

Here are two more comments from users on this same subject:

> ***"When edition time comes, we are able to save time by railroading forms when necessary. The Black & White matrices give us a sense of security in this respect, and we really save considerable time."***
>
> ***"In our early editions, when we must railroad matter after a certain time, we find that we have a cleaner paper, due to the operators correcting errors in the assembler before the lines are cast. This has not slowed up production."***

Do you realize that Black & White matrix contrast service saves the equivalent of two weeks of each operator's time—and each machine's time—every year? A definite estimate of possible savings in your composing room is available to you—without the slightest obligation on your part. And, if you install the service, a definite minimum saving is guaranteed.

WRITE FOR BOOKLET

MATRIX CONTRAST CORPORATION

EMPIRE STATE BUILDING, NEW YORK

SOLE LICENSEES OF THE PERCY L. HILL MATRIX CONTRAST PATENTS NOS. 1,466,437 AND 1,796,023

Eighty Per Cent Color

By A. G. FEGERT

Survey in old plant of D. F. Keller & Co., Chicago, reveals percentage of color work being done and need for press equipment in new building.

WHEN the managing executives of D. F. Keller & Co., Chicago, considered plans for erecting a building to house their growing printing establishment, they realized their need for accurate information concerning the equipment the new plant should have, the type of building that should be erected, and its location. While each member of the firm—the father and founder of the company, namely D. F. Keller, and his three sons, had his own ideas of what should be done, they all recognized that the only way to get the required accurate information was to dig into their own records for the basic facts.

Securing the Data

The first thing on this special research program was to get out all the job tickets covering work that had been done for the previous year. The jobs were classified as to the size sheets required, the best way that they could be run with the most modern machines, and the amount of color used on the jobs. When Franklin Keller, one of the sons, who is treasurer and general manager of the company told me of the results, he remarked that all of the family were surprised to learn that 80 per cent of the work had been done in more than one color. Other illuminating facts were uncovered, which led to the decision as to additional press equipment and devices to aid in expediting multi-color work.

Plant Location

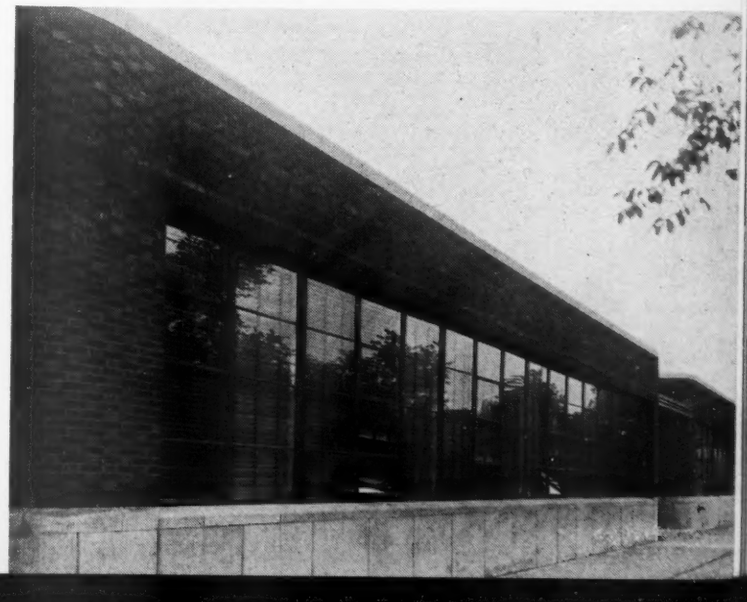
In the meantime, scouting parties were on the job to determine whether the plant was to be located near the down-town district where the firm had been cooped in close sooty quarters near the La Salle railroad station for almost 40 years, or whether advantages of being out where the sky is unobscured and the atmosphere clear of smog would compensate for being away from down-town. Location of customers, residences of employes, and desirability of investment all tended to point to the site purchased at Franklin boulevard and Sacramento avenue, Chicago, about five miles away from 732 Sherman street, where the firm had been located. The size of the lot purchased was 200 ft. by 146 ft.

Building Specifications

Then the type of building was decided upon, after consultation with building experts. But before dimensions were specified, all new machines and other equipment and every unit to be moved were represented on a miniature layout by small blocks of wood and pieces of cardboard. These miniature units were carefully placed in straight line production order on a level of what represented one floor of space, and after the management was satisfied with these technical details, the architect was ordered to put a roof over that kind

(*Continued on Page 30*)

View of one side of brick and steel one-story building constructed for the D. F. Keller & Company printing plant, Chicago. Before dimensions were certified to the architect, all new machines and other equipment as well as all units to be moved into the new building were represented in a miniature layout by means of small blocks of wood and pieces of cardboard. These various units were placed in straight-line production order on what represented the floor space area of the contemplated new building. A cross-current ventillating system to keep the ceilings cool on hot days is employed. Natural illumination is taken advantage of to the fullest possible extent since three sides of the building are practically glass sash. Three V-shape skylights help flood the production departments with daylight.



1938 Mechanical Conference To Be Held in Toronto

Breaking a long established precedent, Manager W. E. Wines, of the A.N.P.A. Mechanical Department, has announced that the 1938 Mechanical Conference will be held in Toronto on June 6, 7 and 8. The Royal York Hotel has been selected as convention headquarters.

In a Bulletin issued by Manager Wines, the following information is printed:

"This will be the first A.N.P.A. meeting ever held in Canada. Toronto was selected, partly on this account, and also because of the excellent railway facilities and connections, and the fact that the Royal York has ample space for the needs of the Conference. It is operated by the Canadian Pacific Railway, and is said to be the largest hotel in the British Empire. One entire floor is devoted to convention space. In addition, there is the Convention Mezzanine, on which are located numerous smaller rooms which will be available if it is decided to hold simultaneous sessions. No plans have yet been made concerning the program.

"Question has been raised as to the possible effect of customs regulations upon exhibits from the United States. The Toronto Convention Association assures us that United States exhibitors will have no more difficulty in exhibiting in Toronto than they would in, say, Buffalo. In the literature of the Association occurs the following statement: 'There is no duty on exhibits entering Canada or returning to the United States. There is no duty on anything in connection with the conduct of the convention. There is duty on souvenirs and samples and advertisements, but if proper arrangements are made, this Association will pay any duty imposed. We have successfully handled some of the largest conventions on this continent, with exhibits valued at over two million dollars.'

"As usual, exhibitors must make their own arrangements with the hotel for space. The hotel has established a rental of $15 each for booths, which has been the customary charge at previous Mechanical Conferences."

Employment and Service Department

for Readers of

Printing EQUIPMENT *Engineer*

Employers, production and mechanical executives may insert notices in this department.

Items for this department may pertain to the following subjects: "Executive Wanted," "Association or Partnership Wanted," or "Position Wanted," readers referring to subjects of a personal nature such as obtaining information about addresses of executives, supplying copies of technical articles and magazines, patents for sale or requests for contacts for developing and/or financing of inventions.

Any reasonable request from an employer or mechanical executive for the printing of a notice upon a subject other than the ones listed above will be granted.

Notices may be printed under the following regulations: First insertion (maximum six lines) is free of charge. All subsequent insertions of the same item subject to a charge of 75c per line in advance.

Address all communications with box number to *Printing* Equipment *Engineer*, 1276 West Third St., Cleveland, O.

WANTED—Mechanical Executive desires position as superintendent or production manager of newspaper in city of not less than 100,000 population, or with chain of newspapers. Familiar with modern methods of cost control including budget management. Reply Box 31.

TWO-TON LINOTYPE REMELTING POT WANTED. Give complete details. Reply Box 32.

Southern Mechanical Conference

By STAFF WRITER

Fine attendance anticipated at Tutwiler Hotel, Birmingham, Alabama, September 20 and 21.

As was announced in the August issue of *Printing* Equipment *Engineer*, the first Mechanical Conference sponsored by the Southern Newspaper Publishers Association will be held at the Tutwiler Hotel, Birmingham, Alabama, on Monday and Tuesday, September 20 and 21. Since the attendance at the conference will be drawn from an area of twelve southern states it is anticipated that the attendance will be excellent. The scope of the conference is intended to interest the supervising mechanical executives in newspaper printing plants which also includes the photoengraving, composing, stereotype, and pressroom departments.

The Committee on Arrangements is composed of Frederick K. Forstall, New Orleans *Times-Picayune;* W. A. Carns, Birmingham *News* and *Age-Herald;* George W. Holloway, Nashville (Tenn.) *Banner;* I. J. Gardner, Chattanooga (Tenn.) *Times;* J. P. White, Charlotte (N. C.) *Observer;* W. B. Sandlin, Miami *Herald* and T. C. McLemore, Mobile (Ala.) *Press Register.*

Frederick K. Forstall, mechanical superintendent of the New Orleans *Times-Picayune*, is chairman of the first conference and will have charge of program. It is anticipated that a plan of rotation of committee membership will be put into effect to which a new conference chairman will be selected for each of the ensuing conferences.

The Program

In preparing for the first conference program the committee had in mind making the program as informal as possible so that all mechanical executives attending the conference would be given every opportunity to discuss the various problems entering into newspaper production from the floor of the conference. All items on the program for the two days of the conference are consolidated without reference to time and date so that the presiding officer may call for discussion of any item at any time in the two days.

Unless changes are made because of unforeseen circumstances these sessions will begin on Monday and Tuesday mornings at 9:30 o'clock and will adjourn at 12:30 p. m. The sessions on Monday and Tuesday afternoons will start at 2:00 o'clock and adjourn at 4:30 p. m.

The program is as follows:

Conference convenes Monday morning, September 21, at 9:30 o'clock.

Announcements by James E. Chappell, chairman of the S.N.P.A. board and publisher of the Birmingham (Ala.) *News* and *Age-Herald*.

Conference Plans, Cranston Williams, S.N.P.A. Secretary-Manager.

Introduction of Fredrick K. Forstall, mechanical superintendent, New Orleans (La.) *Times-Picayune* and *States*, presiding officer for the conference.

Roll call.

Composing Room Topics. Discussions will be led by George Stone of Alanta (Ga.) *Constitution*.

Under the composing room section of the program a list of twenty-five items has been prepared for discussion. Among these are composing room page costs; how to charge for advertisers' changes on proofs; how to improve proof-reading; control of advertising in news; cost of maintenance on machines; methods and materials used in cleaning machine matrices; composing room lighting; how large type should be machine-set on small dailies; apprentice training.

Pressroom Topics

Discussion under the pressroom section of the conference program will be led by W. L. Knighton, of the Birmingham (Ala.) *News* and *Age-Herald*.

A list of thirteen topics for discussion under the pressroom section of the program has been prepared. Some of these are as follows:

Discussion of newsprint—one side of paper will print good, the reverse side is not a good printing surface, and pressmen continuously complain about this condition; cost of regrinding rubber rollers and who does the work?; changing from original methods to improved methods of press drives; humidifiers and their use; what kind of press blankets are best for various types of press ads?; diameters of plate and impression cylinders; thickness of stereotype plates and if over 7-16 in. how much in thousandths, thickness of packing?

Stereotype Topics

The topics for discussion on the stereotype program are numerous. Discussion will be led by W. C. Astor, Jr., of Memphis (Tenn.) *Commercial-Appeal*. Some of the topics for discussion are as follows:

Underlaying and overlaying electrotypes for maximum reproduction; how to overcome dry mat shrinkage; what thickness should stereo plate be when finished for the press?; effect of separate water control on casting boxes; costs and controls for different fuels, preferable location of stereotype room, near composing room or pressroom when the two are separated; plates fitting press cylinders properly.

Photoengraving Topics

The discussions for photoengraving topics will be led by Charles J. Conrad, of the New Orleans (La.) *Times-Picayune* and *States*. Some of the topics for discussion are as follows:

The best screens for newspaper work and information on lighting equipment for taking photographs that are to be copied in the photoengraving department; what about the one-man plant?; strip film and its use; Scherer (Rolup) system of engraving; is combination photographer and engraver satisfactory for the small paper?; the source of supplies.

Exhibits

Allocation of exhibit space will be made by W. A. Carns, Mechanical Superintendent of Birmingham (Ala.) *News* and *Age-Herald*, who is a member of the committee on arrangements. Considerable space will be provided in one end of the convention hall.

The hotel is making charge of $10.00 for a space 10 ft. by 10 ft. and $20.00 for a space 10 ft. by 20 ft. Several manufacturers have arranged for exhibit spaces in other parts of the hotel.

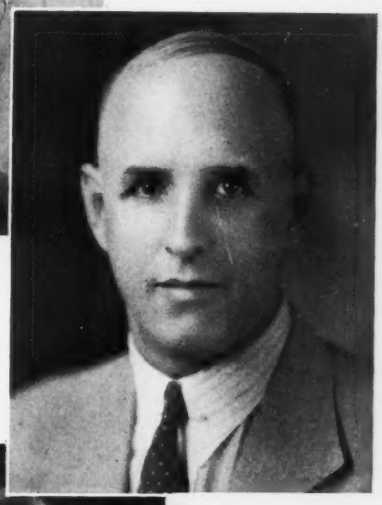
Because of the short time between announcement of the conference plans and the dates, very few requests have been received for information about exhibits. Out of the experience gained at the first conference it is expected that definite arrangements will be made to handle exhibits in the future.

ATF INSURES EMPLOYEES

American Type Founders has adopted a cooperative group insurance program for its employees through which more than 900 workers in Elizabeth, N. J., where the head offices are established, and 23 other localities are provided with a total of nearly $2,000,000 of life insurance. Announcement of the plan was made by Thomas R. Jones, president of the corporation.

The insurance plan is being underwritten by the Metropolitan Life Insurance Company on a cooperative basis whereby the employer and employees share the cost. Individual benefits are determined according to salary, and range from $500 to $3,500 life insurance. Also included in the group plan is a visiting nurse service which is available to employees living in sections where the service is maintained.

COMMITTEE ON ARRANGEMENTS
First Mechanical Conference, Southern Newspaper Publishers Association

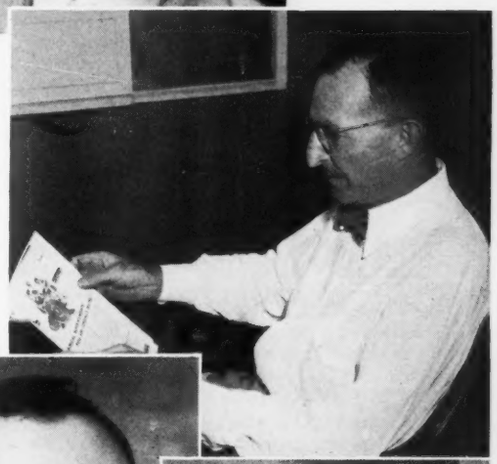


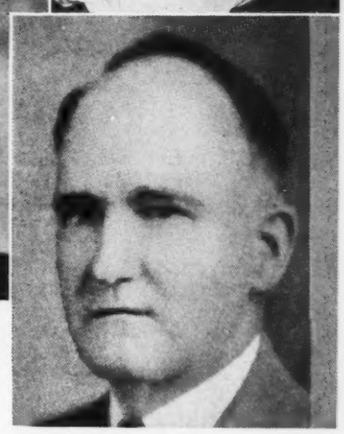
Above: W. B. Sandlin, Mechanical Superintendent, Miami *Herald*

Right: Conference Chairman Frederick K. Forstall, Mechanical Superintendent, New Orleans *Times-Picayune*

Left: I. J. Gardner, Production Manager, Chattanooga *Times*.

Below: T. C. McLemore, Mechanical Superintendent, Mobile *Press-Register*.





Above: Geo. W. Holloway, Superintendent Composing Room, Nashville *Banner*.
Right: W. A. Carnes, Mechanical Superintendent, Birmingham *News* and *Age-Herald*.

Cobb's Comments Concerning Craftsmen's Convention

Full Technical Report

A full technical report of the program sessions of the XVIII Annual Convention of the International Association of Printing House Craftsmen appeared in a special four-page insert in the August issue of *Printing* Equipment *Engineer*. All of the papers presented were abstracted for that report.

THE opening of the Convention program on Sunday evening was an innovation which merits favorable consideration for future conventions. The program was well arranged, impressively conducted in a manner befitting the day. The ballroom was filled to capacity, the ladies, attending in large numbers, added charm and dignity to the assemblage.

Chuka Presents Gavel

A bright spot in the Sunday evening program was furnished by Craftsman Andy Chuka of Phoenix, Arizona, President of the Pacific Society, who presented International President Clark R. Long with a gavel, turned from Ironwood with beautifully carved Cactus filigree circlet, both native to Arizona. The gavel is embellished with a plate of Arizona copper, fittingly engraved for the occasion. In his inimitably witty way, Craftsman Chuka made the presentation, the requirements being that the Eighteenth Annual Convention be conducted with the gavel. President Long accepted the gavel in his gracious manner, and assured Andy it would be a pleasure and an honor to comply and that the gavel would be kept as a cherished memento of the occasion, from the Phoenix Craftsmen.

Sergeant-at-Arms Escorted

Pomp and ceremony featured the appointment of the sergeant-at-arms who is charged with keeping order and dignity during the convenion sessions. President Long stated that this appointment called for selection of a man of fine physique and stature and one that would command the respect of those in session. After serious deliberation he asked that Craftsman Alfred Breitengross (Baltimore) be escorted to the rostrum to receive the charge. The escort proceeded down the aisle—four strapping six footers, each tipping the scale at two hundred and better—S. B. Hammer, president Chicago Club; H. A. Slater, president Providence Club; Harold R. Thompson, Omaha Club; and D. W. (Bill) Stock, Cleveland. By close observation the diminutive sergeant-at-arms could be seen between the escorts. President Long presented the emblem of authority, a full fledged engraved police star (a gift from the Cleveland Club) which would serve as identity during the convention.

After accepting this position of authority Sergeant-at-Arms Breitengross was safely escorted to his position at the entrance, by his stalwart "body of the guard."

These "off-the-record" features added colorful interest to sessions that otherwise were routine, and as the Cleveland convention progressed these were introduced just often enough to keep one in a constant state of expectancy.

Baltimore-Boston-Grand Rapids

The opening three days of the convention were kept alive with color and spirit injected by the campaigns for "The Convention City of 1938." Boston, who seven years ago put in an advance bid, was the most conservative contender—maybe they knew they had it in the bag. Baltimore and Grand Rapids were very much on the job, with all kinds of stunts, buttons, badges, and ballyhoo to keep them in the limelight. A large figure of "Lord Baltimore" in full regalia of that period, greeted all comers, standing majestically in the main entrance to the hotel lobby. Grand Rapids put on a fine show featuring the orange, black and white striped sport coats, with helmets worn by all delegates present.

Registration Data For XVIII Annual Convention

Registration Chairman Charles L. Kuehn has compiled registration data related to the XVIII Annual Convention of the International Association of Printing House Craftsmen held in Cleveland from August 8 to 11.

There are 56 clubs in the jurisdiction of the International Association of Printing House Craftsmen. At the recent XVIII Annual Convention there was a total individual registration of 1060. There were 44 clubs represented. Fourteen cities in which no clubs are maintained were represented at the convention. There were 679 men and 381 women registered.

As is reported elsewhere in this issue of *Printing* Equipment *Engineer*, the Honolulu club was represented by C. T. Oliphant.

The largest registration from any one city other than Cleveland was that of the Chicago club which consisted of 79 men and 36 women or a total of 115 persons.

Canadian Craftsmen numbered 83. Montreal sent 24, Toronto 52 and Winnipeg 7.

The Cleveland registration was particularly gratifying to the Cleveland Club convention group since 200 men and 117 women, or a total of 317 registered from the immediate incorporated Cleveland area.

The grand total of 1060 registrations is said to be the greatest in the history of the International with the possible exception of the 1927 convention which was held in New York in connection with the Graphic Arts Exposition, at which time the registration is claimed to have been approximately 1200.

SOME CRAFTSMEN WHO ATTENDED THE XVIII ANNUAL CONVENTION

1—Left to Right: M. W. Pearson, Cleveland (formerly of the Minneapolis Club) Roy L. Brewer, 1936 Minneapolis Convention General Chairman.

2—Left to Right: C. Harold Lauck, Journalism Laboratory Press, Washington and Lee University, Lexington, Va.; Ben Wiley, Frye Printing Co., Springfield, Ill.; Hec Mann, Kabel Bros., Mt. Morris, Ill.

3—Left to Right: John J. Deviny, Asst. Director, Bureau Old-Age Benefits, Social Security Board, Washington, D. C.; Mark Mullee, Past International Treasurer; Haywood H. Hunt, Editor, *SYK Review;* V. Winfield Challenger, President, Graphic Arts Research Bureau.

4—Left to Right: Thomas Saunders and Oliver Watson, Toronto; Harvey H. Weber, Buffalo, New York.

5—Howard N. King, member Educational Commission, York, Pa., Club of Printing House Craftsmen.

6—Charles MacGregor, Manager Magazine Press Division, Curtis Publishing Co., Philadelphia and Carl Bingham, Sam'l Bingham's Sons Mfg. Co., Chicago.

7—Clarence Groettum and Fred Ripczinski, Minneapolis Club.

8—Left to Right: Mr. and Mrs. R. S. Smith, Montreal Club and Joseph B. Keary, Cleveland Club.

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INTERNATIONAL ELECTIVE OFFICIAL FAMILY WHO WILL SERVE FOR FISCAL YEAR

CLARK R. LONG	JOHN M. CALLAHAN	DEWITT A. PATTERSON	FRANK McCAFFREY	A. V. FITZGERALD
President	First Vice President	Second Vice President	Third Vice President	Treasurer
Washington, C. D.	Cincinnati, O.	Chicago, Ill.	Seattle, Wash.	Milwaukee-Racine C

A beautiful chair was given through a number drawing. Other favorable publicity was in evidence.

Boston won the nomination after a second vote—the 300th Anniversary of Printing in the United States which will be celebrated by a large Exposition in 1938, will be the center of attraction for the convention in Boston. There is little doubt that New York will be the convention host city for 1939—with the Eighth National Graphic Arts Exposition in full swing.

The Research Commission

With the appointment of two Craftsmen to the Research Commission by International President Clark R. Long, the personnel of the Commission is as follows:

Hon. Augustus E. Giegengack, Chairman, Wardman Park Hotel, Washington, D. C.

V. Winfield Challenger, Ayer Building, Philadelphia.

Thomas E. Cordis, Past International President, 500 Samsome St., San Francisco, Calif.

John B. Curry, Past International President, 470 Atlantic Ave., Boston, Mass.

Oliver Watson, Past International President, Richmond and University Sts., Toronto, Canada.

J. Homer Winkler, Asst. Mgr., Ace Electrotype Co., 1501 Superior Ave., Cleveland.

Charles D. MacGregor, Manager, Magazine Press Div., Curtis Publishing Co., Philadelphia.

Craftsman Watson is a repeat appointment. Mr. MacGregor is a new appointee to the Commission.

Andy Chuka, advancing the thought that by 1942 the Craftsmen will need conventions semi-annually, stated that Phoenix will be ready to entertain during the winter months of that year. That's a thought, Andy, and from the reports of the success of the Pacific Society Conference of 1937, we know Phoenix could do the job in a unique and satisfactory manner.

Honolulu Sends Delegate

The convention session of Tuesday morning was given international flavor, with the introduction of Craftsman C. T. Oliphant, active in the organization of the Honolulu (Hawaii) Club. Craftsman Oliphant brought greetings from across the Pacific, and was given cordial applause and welcome. Craftsman George Finegan, San Francisco, instrumental in organizing the Honolulu Club, carried the honor of being sent as an alternate. The club recently issued the first number of *Kolua*, its official publication. *Kolua* meaning to assist, to help, in the Hawaiian language, is a well written, newsy bulletin, and evidences progress of the island Craftsmen. Incidentally we are informed that *Makemake au kou naauao*, liberally interpreted means *Share Your Knowledge*. These progressive Craftsmen have in operation a library of over twenty-five books, with numerous magazines and mongraphs, available to the membership.

Plant Visitations

Cleveland plants which opened their doors to the visiting Craftsmen during the convention, furnished a wide field from which to select—Harris Seybold Potter Company, offset press and cutter manufacturers; Braden-

Left-hand panel: Convention Hostess and some of the Assisting Hostesses at Craftsmen's Convention—Left to right: Mrs. Adolph Jarol, Mrs. M. L. Abrams; Mrs. James Braden, Hostess; Mrs. Mac Sinclair.

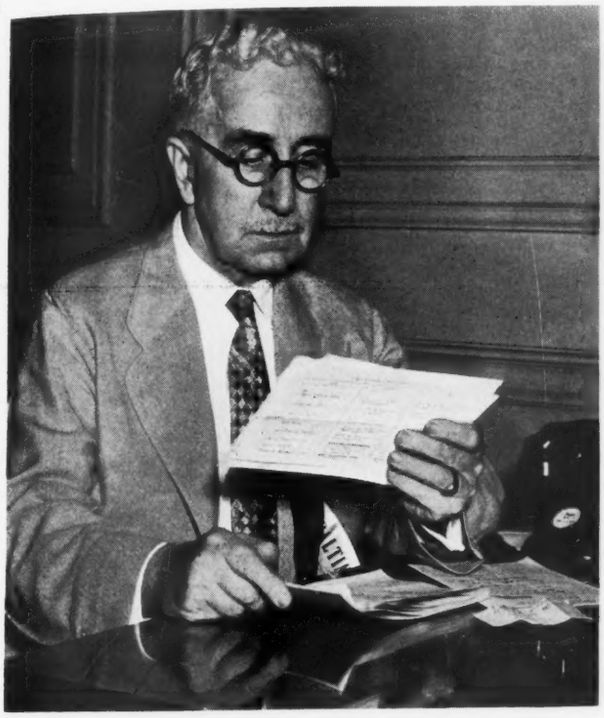
Right-hand panel, Left to Right: Mrs. J. L. Frazier, Chicago; Mrs. A. C. Reis, Louisville; Mrs. Thomas A. Pape, Newark, N. J.

Center: Grace and Doris Cutler, daughters of J. F. Cutler, Pittsburgh.

Sutphin Ink Company, with a large color studio for demonstration and Central Electrotype Company, were visited Monday afternoon. Luncheon was served at these plants, and a cordial reception afforded those who took advantage of the invitations. Tuesday afternoon the Chandler & Price Company, and the Art Gravure Corporation, were hosts—Chandler & Price served a fine luncheon. Here many were interested in C&P's development of an offset job press, which we understand takes a sheet 21x28. This press has not been announced to the trade to date.

Technical Clinics

Four major branches of the Graphic industries were covered by excellent Clinic Programs—Monday, Composing Room, conducted by Norman Welch of Toronto,



L. M. Augustine, International Secretary from Baltimore, seems to have been very busy during the entire time the XVIII Annual Convention was in session.

and Letterpress Pressroom by Charles MacGregor, Manager, Magazine Press Division, Curtis Publishing Company, Philadelphia. Tuesday, Offset Lithography, with Harry A. Porter, Vice President Harris Seybold Potter Company, Cleveland, conducting; and Gravure, directed by M. Raoul Pellissier, Gravure Foundation of America, New York. All sessions were very well attended, the programs comprehensively and thoroughly arranged. Each clinic had four speakers, each covering different phases of the subject; each of the talks was followed by a question and answer period. In these clinics the Craftsmen have found the real educational

A. T. Walker, Central District Sales Manager for Harris Seybold Potter; Ollie Watson, Past International President, Toronto; Capt. A. T. Mann, Vice President, Intertype Corporation, Brooklyn.

meat of the convention program. There is but one thing that will improve them, that is more time allowed for more complete discussion. After attending them, one realizes their value, but feels like the fellow who, after eating a rather sparse meal said, "The sample was good, when do we eat?"

Typographic Clinic

Over forty typographically minded Craftsmen gathered in an informal clinic, following the Tuesday morning sessions. Douglas C. McMurtrie, (Ludlow Typograph Co.) conducted the get-together, which proved to be most instructive. Craftsman George Speyer, Chicago,

Below: V. Winfield Challenger, Philadelphia, President, Graphic Art, Research Bureau; Phil Gleason, Ideal Roller Co., Chicago; A. J. Cooper, Pittsburgh; Harry Dickson, Ideal Roller Co., Chicago; W. C. Deusch, Philadelphia; John E. Cobb, Milwaukee-Racine Club.

Charles L. Kuehn, Registration Secretary of the XVIII Annual Convention, International Association of Printing House Craftsmen, and his assistants were kept busy during convention days in seeing that all Craftsmen were taken care of promptly. Total convention registration was 1060.

In front of counter are (left to right) H. W. Hacker and James Baumruker of Hacker Mfg. Co., Chicago; Francis R. Howe, Warren Paper Co., Cleveland Manager.

Behind counter (left to right) Frank Peysa, Registration Chairman Charles L. Kuehn and Bert Beard, Cleveland Club.

production manager of the J. Walter Thompson Agency, was spokesman for considerable discussion relative to the influence of advertising on typographic trends—that ever-present demand for "something different" which is the bane of the typographer's work-a-day. Much space could be taken on the subject—but not here. Haywood Hunt, Kennedy-Ten Bosch, San Francisco; Howard King, Maple Press, York, Pa.; Hec Mann, Kabel Bros., Mount Morris, Ill.; Glenn Pagett, Typographic Service Co., Indianapolis; Ben Wiley, formerly of ATF Specimen Dept.; Chas. Pitkin, Carnegie Tech, Pittsburgh, and other noted typographers gave many practical and constructive leads on type trends, problems of machine composition, principles of design and layout and many other phases of this most intriguing subject—creation through type and design and its appeal to those who read. The consensus of those present seemed to point to making such a clinic a regular event at future conventions.

Convention Golf Tournament

Chairman of the Golf Committee Don Crews for the XVIII Annual Convention of the International Association of Printing House Craftsmen, reports that 77 Craftsmen registered for the golf tournament at Ridgewood on Monday, August 9.

It seems that Craftsmen Golfers are inoculated with the same virus as golfers in any walk of life—the game's the thing no matter where two golfers meet.

Chairman Crews' report of prize winners and alternates is as follows:

Frank Morrison, Cleveland, won low gross with 73.

On second low gross, R. Smith and R. Robert, each with 79, tossed. R. Smith won the prize.

Blind par: G. Rude 72, E. W. Raasch 72, E. Mischell 72, Gus Kessler 70, O. A. Olsen 70, W. Dove 70.

Selected hole winners were: Will Gorie 21, R. Robert 22, Howard Colehower 22.

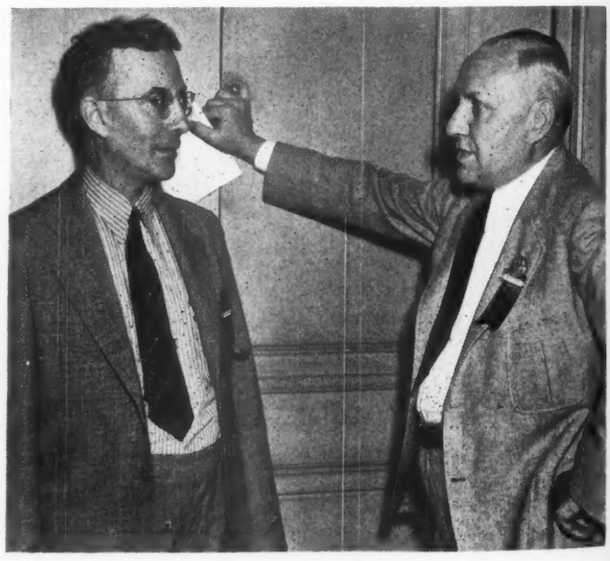
Entertainment

The entire entertainment program was high class and well directed in every respect. The Boat ride on the S.S. Goodtime gave everyone a fine respite from the days that were none too cool . . . and then there was that chance, that comes so seldom during these conventions, of meeting and chatting with the many fine Craftsman friends whom you have waited a whole year to see again, plus the pleasure in finding new ones whom you hope to know better as we meet each year. Music, dancing and entertainment were the attractions of the boat trip on Lake Erie. A dazzling panoramic view of the Great Lakes Exposition gave thrills and color to the trip as the Goodtime left the dock and again as it returned.

The large ballroom, the Red Room and a large section of the mezzanine were filled to capacity Tuesday night at the Annual Dinner Dance. Over 1200 were seated—tables were reserved for all clubs by districts and the whole arrangement was well handled, considering the large attendance. Jackie Coogan and His Hollywood Hit Parade of 1937 gave a fine performance, generous with request and encore numbers. Featuring the floor show were Lila Lee, of movie fame; Don Eddy and Lillian Tours, sensational dancers; Thaya Foster, singing star; Princess Luana, Honolulu's exotic Hula maiden, who appeared in Bing Crosby's picture "Waikiki Wedding;" strollers and incidental music filled in between features. Dancing was enjoyed until the early hours.

Exhibits

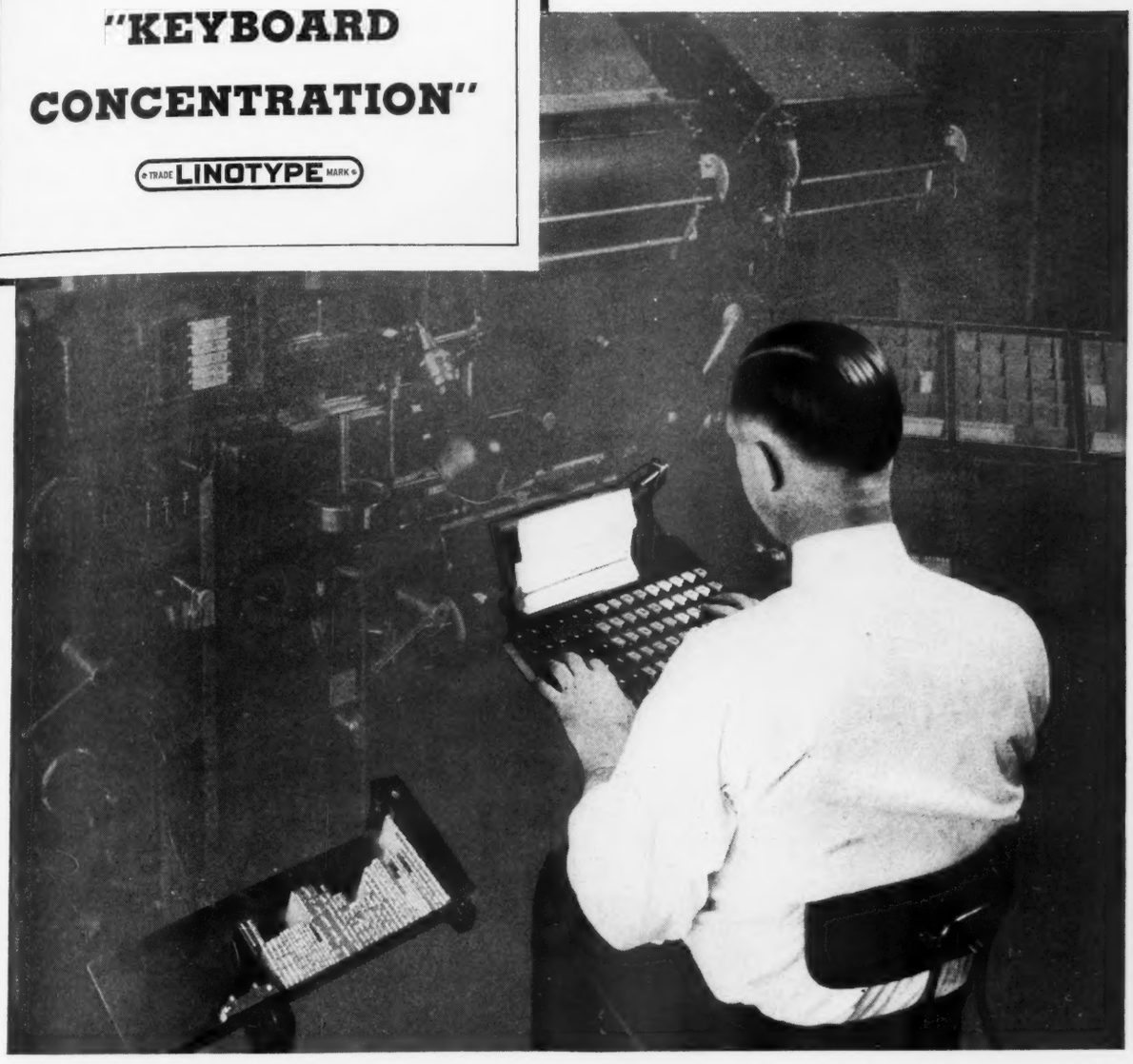
A wide range of technical material was exhibited by the Educational Commission—TVO Boards containing steps in the process of gravure, platemaking and the year's Technical Educational Digest. These were augmented by a complete exposition of the 147 contesting letterhead designs submitted in the International Letterhead Contest, under the direction of Frank McCaffrey, Seattle, International Third Vice President. The designs were as varied as the number submitted and furnished many the opportunity of conjecture as to who the winner would be and to study the technique of letterhead design. Full Technical Report on the XVIII Annual Convention appeared in the August Issue of *Printing* Equipment *Engineer*. Pages 18, 18a, 18b, 18c and 18d.



Fred White, Topeka, and Bob Hueslein, Indianapolis Club of Printing House Craftsmen.

"KEYBOARD CONCENTRATION"

TRADE LINOTYPE MARK



The operator who really turns out the "ems" is the one who can forget mechanism and focus his attention on production. We are constantly calling your attention to mechanical features of the Blue Streak Linotypes. But the purpose of every one of these features is to free the operator's mind of another mechanical thought . . . to make room for more productive thinking. And the operator of a Blue Streak Linotype soon realizes a feeling of confidence in his machine . . . an assurance that its mechanical functions are being performed smoothly, consistently, unfalteringly. The result is "keyboard concentration." It makes work more enjoyable for the operator . . . and much more profitable for his employer.

LINOTYPE MEMPHIS EXTRA BOLD, BOLD, MEDIUM AND ERBAR BOLD CONDENSED

TRADE LINOTYPE MARK

Mergenthaler Linotype Company

BROOKLYN, NEW YORK

New York City • San Francisco • Chicago • New Orleans

Canadian Linotype, Limited, Toronto, Canada

Representatives in the Principal Cities of the World

"It Appears To Me—"

By DRY MAT BILL

Control and direction of cooling when casting newspaper curved stereo plates necessary for fine printing qualities.

IT APPEARS to me that the characteristic tendency of stereotype metals to contract during the solidification process makes it very important that we exercise some semblance of control over the rate of cooling and the uniformity of cooling. This control must be effective before we can hope to obtain curved newspaper stereotype plates that do not have the hills and valleys, heat streaks and honeycomb defects such as are cast in so many stereotype foundries.

Unfortunately, many of the failures caused by this lack of control are not always visible to the eye and as a result we are required to make compensating gestures in the succeeding operations until we reach the point where a vicious circle has been started and the words *precision* and *standard* lose all meaning.

Some stereotyping executives have endeavored to obtain this uniformity of temperature on the cylinder by means of plugging and enlarging the holes in the water manifold. On the jacket of some casting boxes, the water enters at the bottom and comes in direct contact with the shell against which the mold is resting. Naturally, the lower part of the jacket will be of a lower temperature than the center and upper part.

Since stereotype metal contracts during solidification, any great variation of temperature will of necessity affect the surface of the plate. The insulation provided by the shell of the box, the mold and the flow of water is not uniform and therefore cannot permit a uniform contraction of the metal. This lack of uniformity in contraction causes some of the plate failures mentioned above.

Plates cast in boxes having water systems such as I have outlined, usually show heat streaks and porosity in the open spaces on two or three columns nearest the ring side of the cast. In aggravated cases it may cover a larger area and deform the printing surface of the plate.

As a point in illustration, let's consider the stereotyper who has the type of casting box where the cold water enters the core first, then flows into the jacket for cooling purposes before going down into the drain pipe. No doubt there must be some reason for this type of water hookup. But how are we to reconcile this method of cooling with the idea that the cast should solidify from the face towards the rib to obtain a printing surface free from heat streaks and porosity?

When the water goes into the core first, its temperature increases before going into the jacket. When water of a higher temperature flows through the jacket the cast is likely to solidify from the rib side towards the face. I have been told of some instances where stereotype executives have had the local plumber change the system so the core and jacket would cool independently. Separate water controls have been installed with excellent results.

On casting boxes with water on the core only, the only control the stereotyper has over the direction of cooling is in the judicious amount of water used and the insulation which the mold provides. If for some reason you believe that direction of cooling is a joke, I suggest an experiment as follows. On a day when you have time make four or five casts in succession without the use of any water. Then turn on the water full in the core and make four more plates in succession. I dare say the fourth or fifth plate made with the water turned on the core will not be satisfactory, but the fourth or fifth plate made without the use of water will come very close to being excellent from a printing standpoint. Without the use of water, the mold provided sufficient insulation to solidify the face of the plate first. However, with the use of the water on the core sufficient insulation could not be provided to protect the face of the cast.

I am not advocating the casting of plates in this type of box without water as the danger of expansion of the core to the point where it will become warped is too great. However, the intelligent use of water so that the insulative qualities of the mold can be taken advantage of will aid materially in getting what may be termed satisfactory results under existing conditions.

Statements have been made to me by people of authority on printing equipment that the only excuse for double-cooled casting boxes is to obtain faster production. Now, if the practical experiments I have made are true and are logical, then there must be a far more important reason other than that of fast production for double-cooled casting equipment.

A casting box with independent water controls on both the jacket and core makes it possible to control the *direction* of solidification whereas on boxes with water on the core only the rib side of the cast solidifies first.

I believe this principle of plate-casting to be fundamental and would apply on any and all types of casting equipment for stereotype plates. Unless we maintain a higher temperature on the core (cylinder) than we do on the jacket, we will fail to drive undesirable imperfections away from the printing surface to the rib side of the plate.

Generally speaking, I believe it would be ideal if we could maintain a constant and uniform temperature of let us say blood heat (about 90 deg.) on the jacket and a temperature of about 175 deg. to 200 deg. on the core.

It would, I believe, accomplish two definite results: Proper direction of solidification and uniformity of metal shrinkage. These are both essential if we are to make casts which will accept ink readily and print with the minimum amount of press impression.

In another article I hope to stress further the importance of insulation and temperature control in preparing for and casting stereotype plates.

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Printers and publishers who have calls for display lines that pack plenty of wallop in the modern manner will be interested to learn that

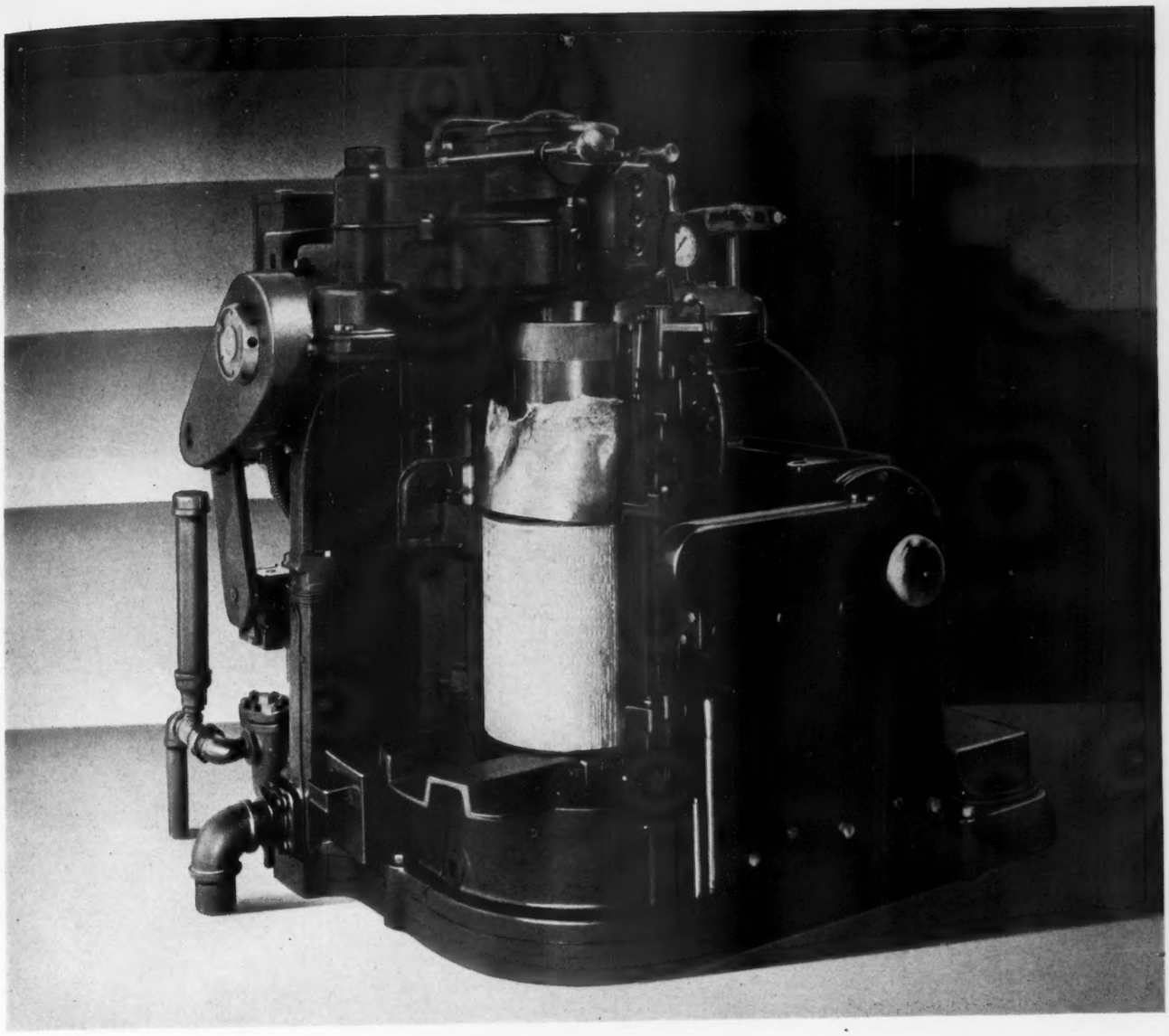
HERE Is a Brief

HERE Is a Brief

Linotype Memphis Extra Bold with Italic may now be had in two-letter matrices in all sizes from 8 to 24 point.

The roman may be had for the All-Purpose Linotype in all sizes from 18 to 144 point.

Shown here are two lines of the two-letter 18 point size of Memphis Extra Bold with Italic.



Automatic Autoplate Users

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CLEVELAND PRESS
DES MOINES REGISTER & TRIBUNE
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NEW YORK DAILY NEWS
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NEW YORK HERALD TRIBUNE
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PHOTO-ENGRAVING CHEMICAL HAZARD TABLE

Here is a valuable table of interest to photo-engraving executives. It has been compiled for and is reprinted by permission of Merck & Company, Inc. The table gives the names of chemicals and fire and poison hazards. Type of poisoning, symptoms, precautions and first aid treatment are given in the case of poison hazard.

CHEMICAL	FIRE HAZARD	POISON HAZARD			FIRST AID TREATMENT
		Type of Poisoning	Symptoms	Precautions	In all cases of chemical poisoning or injury, call a physician immediately. For first aid, however, the following suggestions may be helpful
BENZOL	Inflammable Explosive	Vapor through lungs. Absorption through skin.	Giddiness, sleepiness, muscular tremor, delirium, unconsciousness, death.	Avoid inhaling fumes. Ventilate rooms where used.	Fresh air — artificial respiration if necessary.
CARBON DISULPHIDE	Inflammable Explosive	Vapor through lungs. Absorption through skin.	Headache, dizziness, stomach disturbances.	Avoid inhaling fumes. Ventilate rooms where used.	Fresh air — artificial respiration if necessary.
CARBON TETRACHLORIDE	None	Vapor through lungs. Has caused poisoning through skin.	Nausea, cough, headache, vomiting, dizziness.	Avoid inhaling fumes. Ventilate rooms where used.	Fresh air — artificial respiration if necessary.
CHROMIUM AND ITS COMPOUNDS	Dangerous (1)	Fumes or dust through lungs. Contact with skin.	Bronchitis, eye inflammation, stomach disorders, Eczema, skin ulcers.	Avoid inhaling fumes or dust. For prevention of skin poisoning wash exposed parts with 10% solution Sodium Bisulphite immediately after use.	In case of burns, wash with 10% solution of Sodium Bisulfite, followed by a wet compress of Sodium Hyposulfite.
COPPER AND ITS COMPOUNDS	None	As dust or filings thru lungs or by swallowing.	Bronchitis, vomiting, metallic taste, stomach disorders.	Avoid intake thru lungs or stomach.	When swallowed: Emetic of mustard and water, milk, stimulants.
CYANOGEN AND ITS COMPOUNDS (SODIUM OR POTASSIUM CYANIDE)	Non-inflammable. Releases deadly gas under heat.	As gas or dust thru lungs. As liquid or solid thru skin.	Acute poisoning; suffocation, nausea, vomiting, convulsions. Chronic poisoning: stomach disorders, intestinal disorders, slow pulse, albumin in urine.	Avoid intake thru lungs or stomach and contact with skin. Important: Acids in contact with Sodium or Potassium Cyanide will release Hydrocyanic Acid —a deadly gas. Avoid mixing the two in any sink or drain system.	Cyanide poisoning requires immediate treatment. Give an emetic of mustard and water. Administer at once a fair quantity of Hydrogen Peroxide or a freshly prepared suspension of Iron Hydroxide made by mixing equal parts of 5% Ferrous Sulfate Solution and 5% Sodium Carbonate Solution. Cold douches to head and spine. Aromatic Spirits of Ammonia.
IODINE	None	As vapor entering lungs or as solid in contact with skin causing burns.		Avoid breathing vapor and prolonged contact of crystals with skin.	When swallowed give starch and water.
MERCURY AND ITS COMPOUNDS	None	As vapor or dust thru the lungs, as solid (or in solution) thru the skin. As liquid or solid by swallowing.	Chronic inflammation and ulcers of mouth with increased saliva (and metallic taste) disorders of stomach and kidneys.	Avoid intake or undue contact with skin.	When swallowed give whites of several raw eggs, followed by emetic of mustard and water, followed by a pint of whites of eggs in water.
METOL (PHOTOL, PICTOL, RHODOL, ELON, ETC.)	None	As dust thru lungs or as solid or liquid thru skin.	Pallor followed by bluish color of lips and finger tips, skin eruptions, weak pulse, urinary disorders.	Avoid intake thru lungs or stomach and undue contact with skin.	
NITRIC ACID	Explosive (2)	As gas thru lungs and direct action on skin.	Anemia, thirst, cough, albumin in urine, destruction of teeth, skin burns.	Avoid intake of fumes or vapors and contact with skin.	Acid Burns: Wash freely with water at once, then with a solution of baking soda and water.
POTASSIUM OR SODIUM HYDROXIDE	Dangerous (3)	Direct action on skin in solid or solution form.	Corrosive if swallowed. Skin burns.	Avoid intake thru stomach and contact with skin of solid form or any but very dilute solutions.	Alkali Burns: Wash with water at once, then with a 5% solution of Acetic Acid, or with diluted Vinegar.
SILVER NITRATE	None	Crystals cause skin burn.		Avoid prolonged contact.	When swallowed give salt and water.
ZINC AND ITS COMPOUNDS	None	As dust entering lungs or swallowed, as solutions of salts swallowed.	Headache, burning in stomach, profuse perspiration, muscular pains and exhaustion.	Avoid intake thru lungs or stomach.	See Copper and its compounds.

(1) Contact with organic matter such as paper, excelsior, rags, etc., liberates heat and is apt to start a fire.

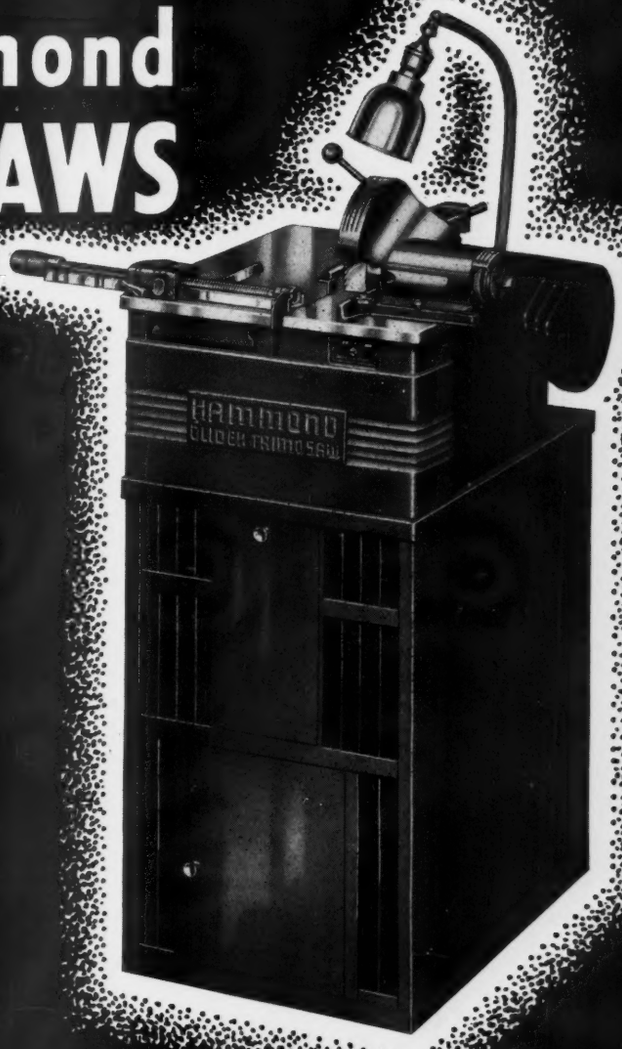
(2) See (1). Also, in case of fire carboys or bottles in which acid is stored may explode and liberate deadly fumes.

(3) Will melt under heat. Molten caustics produce extremely bad burns.

Reprint copies of this table will be sent to any photo-engravers who might be interested. Address your request to General Sales Division, Merck & Co., Inc., Rahway, N. J.

Announcing

2 new Hammond Glider TRIMOSAWS



Two new Hammond Glider TrimOsaws have all the features of the present G-3 Glider now the standard of comparison and leader of the field.

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Chemicals and Mercury

By STAFF WRITER

Some of their properties and how they should be handled in the photo-engraving department to avoid skin injuries.

NITRIC ACID has been the subject of a good deal of research in the laboratories of large acid producing companies, and rather startling developments are in store for nitric users. At the present time an "odorless" nitric is on test, and if the expectations of the manufacturers are realized, a nitric will shortly be offered which will—with ordinary ventilation—provide an etching room without acid fumes.

This is a far cry from the conditions prevailing some years ago before water white acid was generally supplied to engravers. Generally the acid was brown in color and free nitrous fumes permeated every nook and cranny of the building in which it was used. The best alibi ever offered by a salesman of this poor material was to the effect that a colored porter had disappeared. The investigation showed the porter had fallen into an acid vat, as the buttons from his clothes were later found in the bottom of the vat.

In the past fifteen years, water white "engraver's grade" nitric has been generally supplied and few bad systemic effects have been reported. Quite often persons supposed to be in poor health from contact with acid fumes were found to live in poorly ventilated homes or rooming houses and to spend most of their leisure time in taverns where the odor of stale beer did not appreciably foster good health.

Mercury

The use of mercury vapor tubes has increased tremendously in the past ten years, due to their wide use in combination with incandescents for daylight lighting, and also with the introduction of roll-film cameras.

In principle these tubes are exactly the same as the so-called sun lamps which emit a large portion of ultra-violet. The type of tube used for lighting has no effect on the eyes or skin as the burning rays are filtered out by the glass. These tubes should be cleaned at least once a week with a glass cleaner while cold to prevent dust adhering to the glass permanently, which if not removed would dim the strength of light. Scum from the mercury gas after a long period of time gradually deposits on the inside of the tube, for which we have no remedy. The useful life of the tubes will be greatly prolonged if the input voltage is carefully checked so the tubes are not used on higher than normal voltage. High voltage gives exceptional brilliancy when new but deposits on the inside of the tubes are very quickly formed and the efficiency soon drops appreciably.

If a light meter is used weekly to test those cameras fitted with tubes, they can be moved around to match each other so uniform lighting will be the rule and not the exception. This eliminates the photographer's guess work and provides a greater output of good negatives.

When tubes are discarded, the mercury should be dropped to the bottom of the tube, the end carefully broken off and the mercury then run into a metal container which should be closed before discarding. After the loose mercury has been handled, the hands should be washed well with soap and water, then rinsed in weak acetic acid to prevent any possibility of a skin condition. Hot mercury fumes will frequently cause upset stomach and vomiting with severe headaches.

Chromic Acid

Chromic acid and ammonium bichromate, a derivative of chromic acid, are used in the engraving, litho and rotogravure houses in metal printing solutions. Surveys show that a small proportion of workmen are allergic to this material. Some gradually develop a watery blister condition similar to "athlete's foot." This condition is aggravated in others so that sores break out and no amount of local medication will clear it up, and often men are forced to stop work for long periods.

Some authorities claim this condition to be systemic in that the fluorin content of the blood is low, and a combination of local and systemic treatment has produced results and men have actually had this cleared up while working and handling printing solutions.

A sensible precaution for all men handling printing solutions is to wash the hands several times daily in 10% sodium bisulphite solution and thoroughly scrub up with soap and water at the end of the working period.

Cyanide

Cyanide, one of the deadliest of all poisons, is handled as carelessly as table salt by the average workman who has not been informed of some of its characteristics. Taken internally it stops heart action quickly, and while antidotes can be given, they are generally useless unless taken immediately.

The greatest accidental danger with cyanide is its use in the dark room in combination with any acid. Oftimes negatives refuse to strip and some operators flour a blackened negative with weak nitric. Any cyanide solution remaining in the sink will immediately combine with the acid, forming hydro-cyanic gas. This is one of the deadliest gas combinations known and is used in lethal chambers.

Summary

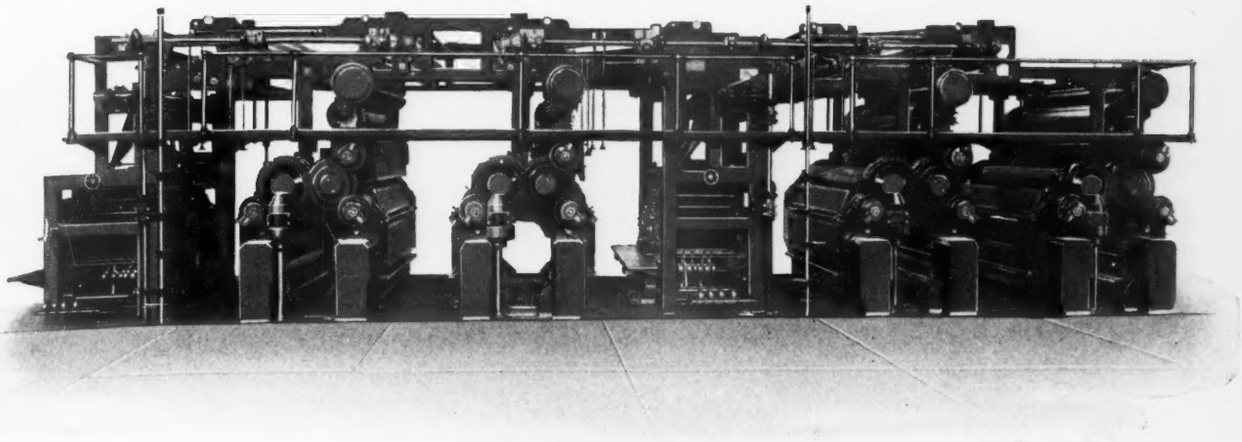
A bottle of ammonia-alcohol solution should always be on hand in all etching rooms. Minor skin irritation should immediately be checked with a sulphonated bitumen salve. Adequate ventilation in the plant combined with a reasonable amount of outdoor activity on the part of the workmen, will prevent any so-called occupational diseases.

TWO FLINT PROMOTIONS

It has been announced that Guy R. Brooks has been promoted to the position of district manager and Charles D. Adkins has been appointed manager of the Indianapolis factory of the Howard Flint Ink Company. Mr. Brooks has been connected with the company for over fifteen years and it is said he bears acquaintanceship or friendship with practically every printer and publisher in Indiana. Charles Adkins, who has been appointed to succeed Mr. Brooks as manager of the Indianapolis factory, has had eleven years' experience in the ink industry. Both men formerly were practical pressmen.

TWO EXCELLENT FOLDERS

The outstanding note in two folders prepared by A. E. Theobald for the Ideal Roller & Mfg. Co. is that both of them are addressed to printing plant mechanical executives and as such have a direct appeal to the reader. Humorous illustrations introduce the subject matter related to Ideal DX Synthetic Newspaper Rollers, which is of a serious technical nature.



SCOTT "Extra Hi-Speed" STRAIGHT UNIT PRESS
The illustration shows a 4-Unit Press with two pairs of Folders and with an extra color plate cylinder on every Unit

Scott Presses in the South

SCOTT Newspaper and Color Presses have an enviable record among members of the S. N. P. A.

There are one or more Scott Press installations in these cities:

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These presses are of modern types—Multi-Unit and Straight-Unit, floor-fed and underfed, with and without color printing arrangements, and their users will be glad to testify to their thorough reliability and complete satisfaction.

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View of production department in the new D. F. Keller & Company printing plant, Chicago. The floor is of 6 in. concrete with hard top.

Eighty Per Cent Color

(*Continued from Page 15*)

of a plant. Supplied with all these data—the result of thorough preparation—the architect had a comparatively easy job. However, he was not given carte blanche, for the Keller boys did some figuring about the engineering side of a printing plant with the result that the ventilating system was modified. During the intensely hot days of the past Summer when the heat waves beat upon the roof, the Keller boys made certain observations and they were satisfied that their cross current ventilating plan to keep the ceilings free from accumulated hot air, actually worked as they had planned it.

The area of the plant, 150 ft. by 146 ft. is covered by a roof which consists of three spans, each of which is 50 ft. wide by the depth of the whole building, 146 ft. At intervals of 20 ft., a wood truss running from East to West, spans the space, and these trusses are supported by solid brick walls and steel beams and uprights. Each of the three sections, 50 ft. by 146 ft., has a skylight running from North to South, each skylight being 100 ft. long and 10 ft. wide. These skylights are V-shape, and every alternate section opens to horizontal position to provide ventilating means for eliminating possible hot air pockets in the irregular ceiling, during the hot season. The highest parts of the skylight sections are 26 ft., while the lines of steel beams at each 50 ft. line are 12 ft. from the floor.

Three sides of the building are practically all windows, which with the three long skylights, permit daylight to flood into the plant. Thus the saving in electric light bills compared to what was paid in the former location amounts to a sizable sum. The glass in the windows—called factory glass—is fitted into steel ventilating sash.

The floor is made of 6 in. concrete with hard top. The top of the roof is provided with masonite waterproof insulation and four coats of roofing felt, asphalted down. The heating plant consists of an oil burner with low pressure boiler to furnish steam to nine "Young" unit heaters. The exterior of the building is curved at the corners in streamline fashion.

The cost of the structure and site was approximately $70,000, and approximately $100,000 was spent for new machinery and other equipment.

New Equipment

New equipment ordered after plans had been made for the new building, now installed and in service, includes two 12 x 18 Kluge units; one Miller Major press and one Miller two-color press; one Craftsmen's line-up table to take a 64-in. sheet; four A.T.F. no-offset sprays with air piping and electrical switches on every press, ten steel galley cabinets and many fonts of new modern faces of type; one Challenge drill. Other new equipment purchased at the old plant during recent months and moved included: Four Miehle Vertical presses and two Miehle Horizontals; Two No. 2 Kelley presses; one 00 Cleveland folder; one 56-in. Seybold cutter; one Boston stitcher and eight steel cabinets. Included among some of the other machines moved to the new location were three large Miehle cylinder presses and three Linotype machines.

Plant Layout

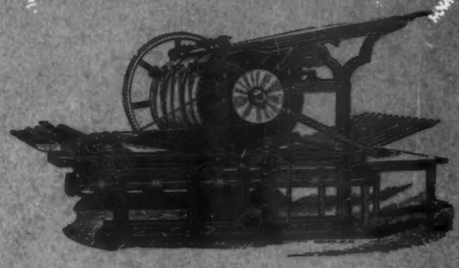
The layout of the plant is arranged to expedite the handling of work without any back-tracking. To the left as one enters the building from the street going south, is the suite of offices—one large and several private offices; to the right, across the hall, is the Linotype composing room with the machines and hand-set cabinets lined up along the row of windows facing north; south of these are the line-up table and lock-up department; in the center toward the West is the group of Horizontals and Kelleys, while along the row of windows to the West are the Verticals, Kluges and Gordons. Lined up along the windows in the south part of the room are the large cylinders and near them are the one and two-color Millers. Alongside the cylinders toward the approach to the shipping room at the east is the bindery. The middle space toward the east section is used for storing cuts, paper stock and other materials. Lift trucks capable of handling skids of paper weighing as much as 4000 lbs. are being used.

Business Started In 1899

The business was started by D. F. Keller in 1899. He made such a success that he was able to give each of his three boys a university education, but that highbrow process did not spoil them for the printing business. George R. is a Yale graduate and he is vice president of the company, but earns more than his keep as a salesman. Howard J. is also a Yale graduate. He sells printing and writes copy whenever an account needs it, besides which he does layout work and is also a modern typographer. He is officially listed as secretary. Franklin Keller is treasurer and general manager and if he is asked about his college he will tell about having graduated from Northwestern University and proud of his Alma Mater and its football team. All of the boys are over six feet tall.

Franklin Keller in telling about results of canvassing the new neighborhood for business mentioned that volume has increased considerably since the firm got started in the new location, which fact seemingly justifies the selection of the site. With the zoning of the territory to the east of the plant for future manufacturing purposes, prospects for the further increase of the business are good, and when the need arises, another 50-foot section building can be erected on the extra space to the west of the plant which is now used for parked cars belonging to employes of the company.

A LITTLE PRESS BECAME A BIG PRESS



The Cottrell printing press shown in the lower picture was quite the last word in equipment of its kind in the Civil War era. It was known in those days as a steam power press, and emphasis was laid upon the appearance of this early unit as well as its printing efficiency. Note the ornamental supporting columns. One user wrote: "We have a handsome press, and a good one." Another referred to an early Cottrell construction as "one of the best and handsomest pieces of printing equipment that ever came from a press manufactory."

Today's Cottrell presses are entirely unlike the early models, yet there are two characteristics that are common to all the latest as well as the early Cottrell machines . . . the progressiveness of design and integrity of construction which have made these presses outstandingly successful for nearly three-quarters of a century.

The big unit shown above is a modern Cottrell rotary press, which prints a 50x72 sheet in five colors simultaneously at remarkably high speeds. Other present-day Cottrell equipment includes single- and multi-color magazine presses, rotogravure presses, and printing presses for paper converters.

C. B. Cottrell & Sons Co., Westerly, R. I.

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COTTRELL

Egyptian Blue

By STAFF WRITER

Research and spectrophotometer reveal interesting color facts

A REMARKABLY permanent blue coloring matter which colored the tombs of the Pharaohs a thousand years before King Solomon built his temple was analyzed recently by industrial chemists. They found that in some ways this blue was similar to the present-day pigment, ultramarine.

Analysis showed, however, that while this ancient blue was fast to light, heat, and most deteriorants like alkalies, mild acids, and salt water, it was inferior in many ways to existing blues. Its manufacture today would not be commercially practical.

Tests carried on at the Research Laboratories of The International Printing Ink Corporation recall interesting facts about the earliest known methods of dry color manufacture. This "Egyptian Blue" is the oldest artificial pigment. While certain colors and pigments made from herbs, animal matter, and insects (like the cochineal red of the Aztecs) may antedate Egyptian Blue, it is the first color to be actually compounded from inorganic substances.

Here is a photograph of the recording photoelectric spectrophotometer in operation. The color sample to be analyzed is placed at the end of the long tube. Its characteristics, transmitted by a photoelectric system, are translated into a prosaic looking curve traced on the recording drum in the foreground.

Its use dates back nearly to the dawn of civilization. It was prepared and sold as early as 3000 B.C.—long before the empires of Greece and Rome even existed.

An analysis indicates that this same blue pigment which was popular in the days of Rameses and Tutankhamen was used centuries later in fresco work on walls of Roman cities. Fragments of a wall from the ruins of Pompeii (near the port of Naples in modern Italy) were analyzed and found to be colored by this old Egyptian Blue.

This is how these tests happened to be made. Chemists at IPI heard that samples of these early blues had been sent to a large museum in Massachusetts. Since the pigments were reported to have exceptional qualities of permanence—samples 3000 years old were still brightly colored—the laboratory men asked to borrow some of these ancient fragments for analysis. Museum officials sent down small amounts of known Egyptian Blue along with some wall pieces of Roman origin which they believed were colored with the same pigment.

Any sort of chemical analysis would destroy the priceless samples, so it was decided to make a spectrophotometric comparison. This was accomplished by means of the recording photoelectric spectrophotometer —an instrument which automatically determines the light reflectance properties of any object by means of a complex photoelectric system. Applicable to all types of color analysis work, this machine may also be used in determining chemical compositions.

An analysis showed that the properties of the Egyptian Blue and the blue finish used to decorate the Roman wall were nearly identical. The Egyptians who made this blue originally must have exported it to Rome, and probably to Greece, Persia, Phoenecia, Babylon and other countries powerful before the Christian era.

Research men discovered that until very recently the secret of this pigment's manufacture was unknown. An English scientist who has studied this subject learned that since the second century A.D., the formula and procedure for making the blue had been lost. He announced last year, however, that he had reconstructed one of the early Egyptian furnaces and had determined just how this oldest artificial pigment had been made.

He found that sand had been mixed with lime, soda, and copper carbonate—one of the earliest metal ores. Then this mixture was heated to a temperature between 1450 and 1650 deg. F., and this heat was maintained for several days. Exact temperature control was an essential factor in the process, and how early peoples with no thermometers or temperature control devices managed to keep the heat at proper intensity is a credit to their ingenuity. In all probability, temperature was noted and regulated by judging the heat of the glowing mass by its color.

Apparently, to a race that built the Pyramids and constructed temples which still stand today, a problem in temperature control was by no means insurmountable.

Other mechanical executives will appreciate having you tell how you solved a production problem in *Printing* EQUIPMENT *Engineer.*

CRAFTSMAN LETTERHEAD CONTEST

Third International Vice President Frank McCaffrey of Seattle, Wash., who supervised the Craftsmen's Letterhead Contest, brought to Cleveland and displayed 40 panels of specimens entered in the contest.

Judges in the contest were: Charles H. Kellstadt, Gen. Mgr. of Sears Roebuck's Cleveland stores; R. C. Cameron, Asst. Mgr., Specialty Appliance Sales Div., Appliance Merchandising Dept., General Electric Company, and E. J. Ward, Art Director, Montgomery, Tessenmeyer & Ward.

Awards were made as follows: First Prize: Albert A. Woermann, 94 217th Street, Queens Village, Long Island. Second Prize: G. Gehman Taylor, The Abbey Press, Gordon Taylor, Inc., 185 Albany St., Cambridge, Mass. Third Prize: J. F. Tucker, New Philadelphia, Ohio.

Five honorable mention awards are as follows: J. F. Tucker, New Philadelphia, O.; James G. Clarke, The Wood Clark Press, 75 Broad Street, Boston, Mass.; John Z. Kowalskey, 6426 Arthur Ave., St. Louis, Mo.; Glenn M. Pagett, 75 N. New Jersey St., Indianapolis, Ind.; Ben Wiley, 624 E. Capital Ave., Springfield, Ill.

EVERY UNIT

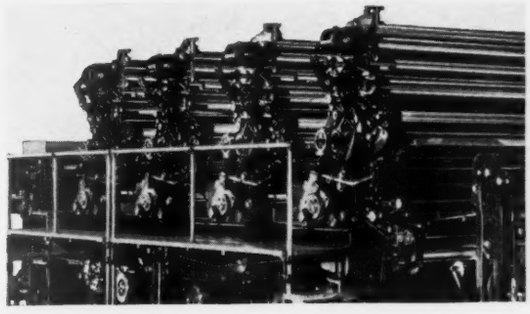
FROM ONE TO FOUR COLOR MECHANICALLY DUPLICATED

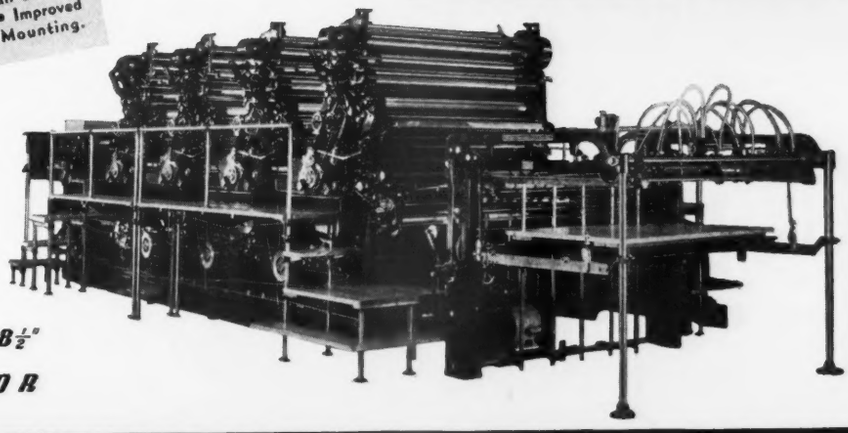
• Simplicity and uniformity of design, interchangeability of parts–the same part of each unit exposed at the same time, thus permitting more than one person to work on plates and blankets, is a feature of the Harris color group of presses.

The use of multi-unit construction with the Harris patented double size transfer cylinder gives these presses exceptional advantage in convenience of operation with the least number of transfer points.

SOME FEATURES OF HARRIS COLOR GROUP

Revolutionary Harris H. T. B. Stream Feeder • Precision Tapered Pre-loaded Roller Bearings • Choice of Feed Roll or Rotary 3 Point Registering Mechanism • Micrometer Dials for Setting Printing Pressures • Quick Change Plate Clamps • Double Size Transfer Cylinder • Inker Load Eliminated from Printing Couplet • Harris Cleanable Ink Fountain • Adjustable Ink Vibration • Multi-Unit Construction • Spiral Gear Drive • Spring Grippers Throughout • Efficient Pile Raising and Pile Lowering Mechanism • Vacuum Control of Sheet in Delivery • Dial Press Speed Indicator • Feeder and Delivery Accommodate Any Style or Size Platform • One Piece Base with Extra Heavy Framing and Construction • Micrometer Adjustment of Ink Supply • Ball Bearing Mounting of All Ink Rollers • Improved Delivery Gripper Bar and Mounting.

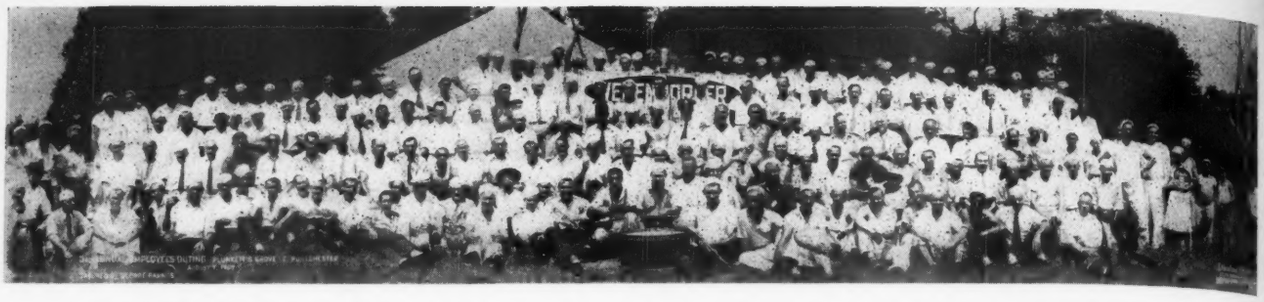




LSH • 46½" x 68½"
FOUR COLOR

HARRIS · SEYBOLD · POTTER · COMPANY

GENERAL OFFICES: 4510 E. 71st St., Cleveland, Ohio • HARRIS SALES OFFICES: New York, 330 West 42nd St. • Chicago, 343 South Dearborn St. • Dayton, 813 Washington St. • San Francisco, 420 Market St. • FACTORIES: Cleveland, Dayton



WEBENDORFER-WILLS CO., INC., PICNIC BRINGS LARGE ATTENDANCE

Here is shown a view of those employees attending the Webendorfer-Wills Company's third annual outing held near Mt. Vernon, New York on August 7. Although this reproduction from the photograph taken at the picnic is small, it appears the Webendorfer-Wills employees enjoyed themselves immensely.

Recent Equipment Sales

Complete Duplex Shipment

A new 12-page Duplex Unitubular press with roll stands at one end, equipped with a combination half and quarter page folder has been shipped to the Paryski Publishing Company, Publishers of the *Ameryka Echo*, Toledo, O. This press is equipped with the latest devices for printing circulars and job work, besides regular newspaper printing—removable interchangeable fountains, quick-fold centering device and quick lockup. Two double-color cylinder units, two double reversible units, an imprinting device and color registering mechanisms on all plate cylinders have been provided. An electric paper roll hoist and automatic tension devices and a complete set of Tubular stereotype machinery and a Directomat have been included with the shipment.

The press will be equipped with a 60 h.p. full automatic General Electric press drive for operating the press at 40,000 papers per hour.

Recent Intertype Installations

Intertypes have been ordered recently by the Rand Typesetting Service, Belmont, Mass.; The Craft Press, Inc., Fayetteville, Pa.; The Carlisle Press, Inc., Brooklyn, N. Y.; Stonington *Mirror* and *Mystic Journal*, Stonington, Conn.; Ranger-Cook, Inc., South Bend, Ind.; Garrett Press, San Francisco, Cal.; Decatur (Ill.) *Herald-Review;* St. Joseph (Mo.) *News-Press & Gazette;* Akron (Ohio) *Times-Press;* Pana (Ill.) *News;* Washington (Iowa) *Journal & Democrat-Independent;* Artintype, Inc., New York City; York Composition Co., York, Pa.; Crown Printing & Engraving Co., Fresno, Cal.; Providence (R. I.) *Journal & Bulletin;* Wills Point (Tex.) *Chronicle;* Booneville Printing Co., Booneville, Miss.; Commercial Printing Co., Tucson, Ariz.; New Orleans (La.) *Times-Picayune;* Nichols Typesetting Service, Long Beach, Cal.; Jefferson City Printing Co., Jefferson City, Mo.; Crown Printing Co., Brooklyn, N. Y.; Printers Service, Inc., Nashville, Tenn.; Jamaica Law Printing Co., Jamaica, L. I., N. Y.; Nyack (N. Y.) *Journal-News*.

Bureau of Engraving Installs Ludlow

The United States Bureau of Engraving and Printing at Washington, D. C., has installed Ludlow equipment. It is used for the composition of government bond coupons and certificates, for over-printing on postage stamps, particularly for pre-cancelling, and for ruleform printing.

Newspapers Install Elrod Equipment

Elrod lead, slug, rule and base casters have been installed recently by the Davenport (Iowa) *Times;* Fort Wayne (Ind.) *Journal-Gazette;* Indianapolis (Ind.) *Times;* Longview (Wash.) *Daily News;* Grand Rapids (Mich.) *Herald;* Santa Ana (Calif.) *Register;* Winfield (Kan.) *Daily Courier;* Jamestown (N. Y.) *Post;* Sturgis (Mich.) *Daily Journal;* Rome (N. Y.) *Sentinel;* Mt. Clemens (Mich.) *Leader-Press;* Dixon (Ill.) *Telegraph;* Houston (Tex.) *Labor Messenger;* Bridgeport (Conn.) *Herald;* Kannapolis (N. C.) *Independent* and the Chicago Heights (Ill.) *Star*.

Newspapers Install Ludlow Equipment

Ludlows have been recently installed by the Oakland (Calif.) *Post-Enquirer;* Fostoria (O.) *Daily Review;* Kannapolis (N. C.) *Independent;* Kitchener (Ont.) *Daily Record;* Whiting (Ind.) *Times;* Mt. Vernon (N. Y.) *Daily Argus;* Brantford (Ont.) *Expositor;* Harwich (Mass.) *Independent* and the Kalamazoo (Mich.) *Review*.

Mergenthaler Linotype Company

Linotypes recently have been installed by the Adcraft Studios, Inc., Nashville, Tenn.; Escanaba Daily Press Company, Escanaba, Mich.; Post Elm and Post Square, Cincinnati; Van Printing Company, Chicago; Mrs. Stella Podlaskowski, Detroit; George Battalora, New Orleans; Houlton (Maine) *Pioneer-Times;* Manhattan Linotyping Company, New York City; Command and General Staff School, Fort Leavenworth, Kan.; Peerless Printing Company, New Orleans; Tribune Publishing Company, Oakland, Calif.; Anadarko (Okla.) *Daily News;* Houma (La.) *Courier;* Oxnard (Calif.) *Evening Press;* Fairmount (Ind.) *News;* La Porte *Beacon* and Pasadena *Light*, Pelly, Texas; Webster (Mass.) *Times;* Wilmington (Del.) *Sunday Star;* Corpus Christi *Times* and *Caller;* Frederic Ryder Company, Chicago; *Journal-Standard* Publishing Co., Freeport, Ill.; Rockford Typesetting Company, Rockford, Ill.; Capital *Gazette* Press, Annapolis; Greenville (S. C.) *News* and *Piedmont;* Cleveland *Press;* Quality Linotyping Service, Inc., New Orleans; *Farmer-Labor Press*, Council Bluffs, Iowa; LaTurno Printing Company, Harlingen, Texas; Dyersville (Iowa) *Commercial;* Steck Typesetting Company, St. Louis; Army Field Printing Plant, Fort Benning, Ga.; Madison (Ind.) *Courier;* William Feather Company, Cleveland; Austin (Texas) *Statesman* and *American;* La Compagnie De Publication de Rouyn Limitee, Rouyn, Que.

Linotypes recently have been installed by the *Hampshire Review*, Romney, W. Va.; City High School District, Los Angeles; Kenji Kasai, San Francisco; Highland (Ill.) *Journal;* N. W. Ayer and Son, Inc., Philadelphia; Ashland (Ohio) *Times-Gazette;* Barre (Vt.) *Daily Times;* Special School District, Little Rock, Ark.; Atlanta (Ga.) *Journal;* Stonewall Jackson Training School, Concord, N. C.; *Daily Quill*, West Plains, Mo.; Evansville (Ind.) *Press;* Joplin (Mo.) *News-Herald;* Simons Typesetting Company, Inc., Chicago; Willows (Calif.) *Journal;* C. M. E. Church Publishing House, Jackson, Tenn.; Sutton Printing Company, Waynesburg, Pa.; Florida *Times-Union*, Jacksonville; Mark Gray Company, Inc., Indianapolis; Louisville *Times* and *Courier-Journal;* Speed-E-Cross Rule System, Los Angeles; Kenosha (Wis.) *Evening News;* Glasco (Kan.) *Sun;* Shelby Salesbook Company, Shelby, Ohio; Salisbury (N. C.) *Herald;* Northfield (Minn.) *News;* Winston-Salem *Journal* and *Twin City Sentinel*, Winston-Salem, N. C.; Onarga (Ill.) *Leader and Review;* Momence (Ill.) *Progress;* Detroit Post Printing Company; University of Virginia, Charlottesville, Va.; New Haven (Conn.) *Register;* Dwyer Printing Company, Lynn, Mass.; Spirit Lake (Iowa) *Beacon;* Student Publications, Inc., Iowa City; New York State Vocational Institution, West Coxsackie, N. Y.; Gadsden (Ala.) *Free Press;* Sylacauga (Ala.) *Advance;* Western Typesetting Company, Denver; James L. Stewart Company, Pittsburgh; Selma (Ala.) *Times-Journal;* Manchester (N. H.) *Union-Leader;* Workers Publishing Association, Inc., Chicago; Champaign (Ill.) *News-Gazette; Monitor-Patriot*, Concord, N. H.; *Daily Times Leader*, West Point, Miss.; Nashua (N. H.) *Telegraph*.

HUGHES PROMOTED

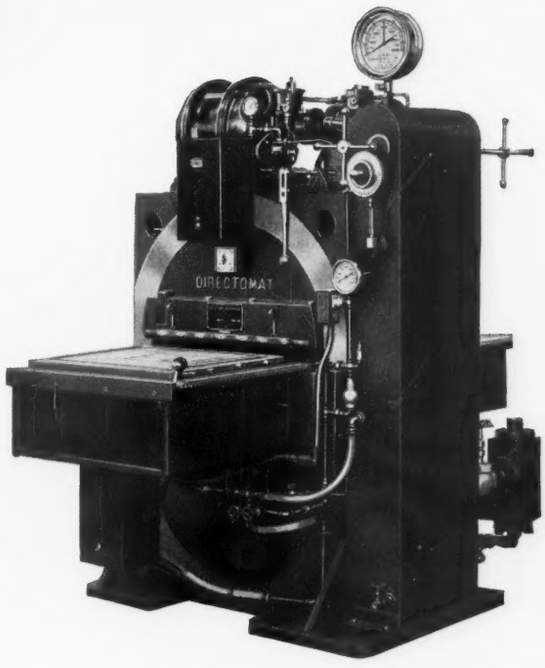
J. H. Hughes, who has been with the Mergenthaler Linotype Company thirteen years, has been made office manager of that company's overseas sales department.

COST OF LIVING ADJUSTMENT

The General Electric Company announced an increase of an additional one per cent in its Cost of Living Adjustment plan, raising it from four to five per cent. The plan provides for automatic increases in employee earnings, based on the progress of the Cost of Living Index as published by the U. S. Department of Labor.

According to the terms of the plan, if the cost of living goes up, one per cent is added to employees' earnings for each point of rise in the index up to 90. If the cost of living goes down, adjustments will be made until the index reaches 80. The plan further provides that the adjustment may take place at the half way mark between each point. The present index figure of 84.5 thus permits the employee earning increase to five per cent.

THE DIRECTOMAT STANDS SUPREME!



THE DIRECTOMAT
Matrix Press and Vulcanizer

will be shown in operation at the

National Printing and Allied Industries Exposition

Booths 178 and 179, Coliseum—Chicago—Sept. 11 to Sept. 19

IT WILL PAY YOU TO INVESTIGATE!

Bring your own forms to mould from!

(1) It Saves Time:

● When COLD-moulding (mill conditioned dry mats) the actual moulding operation takes only six seconds as against fifteen to thirty seconds on a modern matrix roller. When HOT-moulding (plastic mats or wet mats) it takes from two to seven minutes to mould and dry a matrix in ONE operation.

(2) It Improves the Quality of Mats:

● With proper care and suitable materials the DIRECTOMAT will produce a better and sharper matrix than can be obtained by matrix rollers, steam drying presses and the brush beating system.

(3) It Saves Type and Pattern Plates:

● The DIRECTOMAT eliminates the troubles caused by the inherent tendency of the roller to push the type off its feet, crush weak slugs, and electrotypes, break the kern of italic type, turn over rules, spread electrotypes and zincs, thicken the screen dots of halftones, and cause hard edges.

(4) It is Versatile, Safe and Simple to Operate:

● DIRECTOMAT Presses for hot and cold stereotype mat moulding may be equipped to handle the following additional work:

(1) Wax and Tenaplate moulding.
(2) Phenolic resin mat and Rubber plate vulcanizing.

50 Installations Bear Out Our Claims

LAKE ERIE STEREOTYPE EQUIPMENT CORPORATION

Division of Lake Erie Engineering Corp. **Kenmore Station, Buffalo, N. Y.**

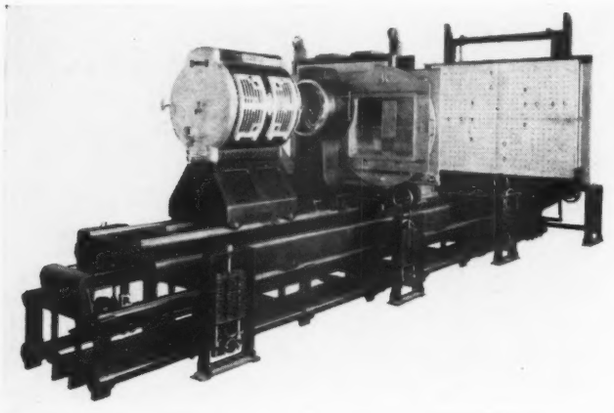
New Printing Equipment and Supplies

Projector and Photo-Composer

Large posters and displays are sometimes printed from hand-drawn press plates. With the aid of a projector marketed by the Rutherford Machinery Co., it is said, a more economical and more exact form of reproduction for this type of work has been achieved.

Instead of hand work to a large sized press plate, process work is now carried on by using 8 in. by 10 in. negatives which are color corrected (stained and etched). A number of different size reproductions may be made from one piece of art work. Each of these sizes will register correctly in all of their colors and carry all of the detail and characteristics of the original.

Projecting is of course far from new, but its methods have progressed. *Penrose's Annual* of 1937 carries mention



View showing Rutherford Projector in operating position. Suction Board has a vertical range of 22 in. and a horizontal range of 36 in. Negative Holder has a vertical range of 10 in. with horizontal range of 12 in. Both Negative Holder and Suction Board are graduated from register. View of the machine is from rear angle of operator's side.

of efforts to speed up the sensitive albumen film by an overcoating of silver, using an insulating film between the two layers. Reason for this move can readily be seen when exposures of 40 minutes are the rule in many projections. However, exposures of from 2 to 8 min., normal on vacuum printing frames, are the rule on this new projector.

The machine is 9 ft. wide by 9 ft. high by 20 ft. long and rests in four cradles, spring cushioned, combined with the three-point suspension installation to assure freedom from transmitted vibration. As this machine embodies all of the modern photo-composing devices for placement and register of the photographic image, it may be used as one with limitations; for example, the enlargement from the 8 in. by 10 in. negative is restricted to a range of from four to ten times with the 13 in. aprochromatic Goerz lens with which the machine is equipped.

The light, said to be similar to the battleship searchlight type, throws its beam through a condenser to the negative, then through the lens and on to the press plate. In blowups the light source must necessarily be powerful. Where the heat generated by such a light to fall directly upon a negative, breakage would surely result. This projector, however, despite the fact that the carbons are about 14 in. or so from the first lens of the condenser. makes use of a stream of air forced upward between the negative and the forward lens of the condenser. The condenser consists of a double lens unit. The assembly makes possible the use of regular albumen or deep-etch coatings. Only the customary lighting precautions familiar to these coatings need be taken.

The plate vacuum holder permits a movement to three decimals from a central point in both horizontal as well as vertical direction. It is also possible to confine the vacuum to any one of three plate sizes by means of shut-off cocks on the vacuum holder. Sharp focusing and registering devices are accessible to the operator at a point near the press plate, where the greatest need for these devices is felt. The principle of the photo-composer has also been applied to the negative holder readings to three decimals being possible in a vertical as well as horizontal position. The negative holder may also be rotated, being positioned on the machine in a device very similar to the screen holder on a camera. The negative is placed in the negative holder on a lineup table, center marks on the work being used as guides. When the negative is positioned, it is held by clamps which take care of any slight expansion caused by heat in the glass.

The 8 in. by 10 in. negatives or positives have a work area limited to 6 in. by 8 in. They may be either screened or continuous tone. When they are screened the 200 to 400 line screen is favored. When a continuous tone negative is used, it is necessary to place a screen in contact with the press plate. The Mezzograph screen is particularly adaptable to such a method, since no pattern results from its use. Screen angle problems are also absent in this case.

P-Double-E File No. 2D19.

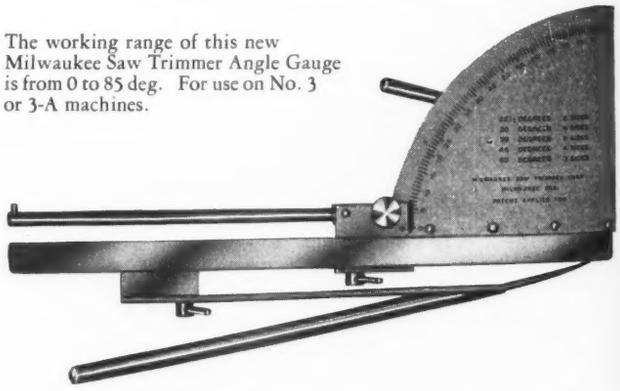
New Angle Gauge

The Milwaukee Saw Trimmer Corporation has just perfected a new angle gauge for exclusive use on its No. 3 or No. 3-A C&G Saw-Trimmers.

It has working range from 0 to 85 deg., which permits the cutting of practically any desired angle in metal or wood, for blocking out, or for decorative purposes.

A rule clamp provided on the gauge allows the clamping of rules to three picas thick, and an angle as small as

The working range of this new Milwaukee Saw Trimmer Angle Gauge is from 0 to 85 deg. For use on No. 3 or 3-A machines.

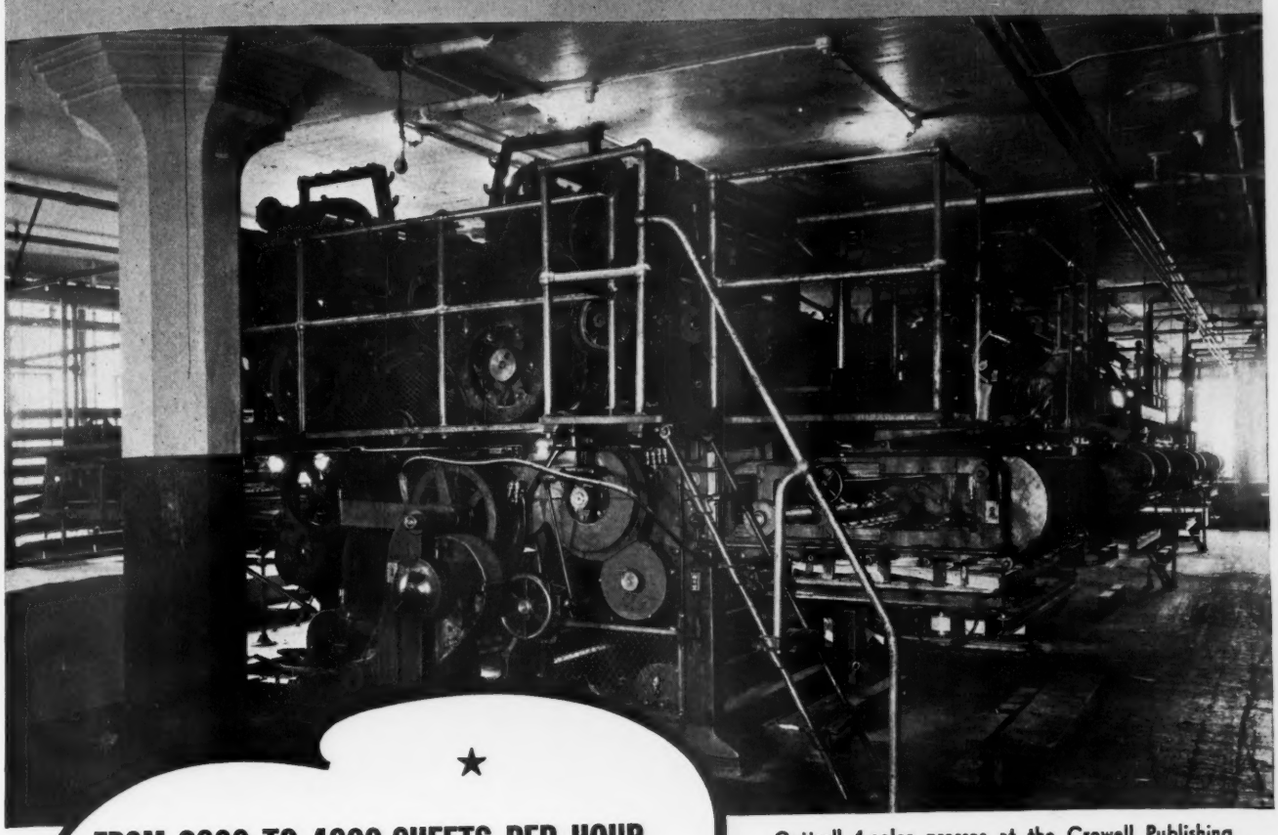


five degrees can be cut. It can be removed quickly from gauge when wood or metal blocking is to be sawed.

Because advertisers are demanding layouts at every conceivable angle, this new device was created for newspaper, trade and commercial printing plants and typographers using C&G Saw-Trimmers.

P-Double-E File No. 1Z.

TIMKEN BEARINGS INCREASE PRESS OUTPUT-



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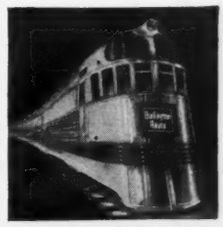
FROM 2800 TO 4000 SHEETS PER HOUR AT CROWELL PUBLISHING COMPANY

Cottrell 4-color presses at the Crowell Publishing Company. Impression cylinders mounted on TIMKEN Bearings.

A short time ago the Crowell Publishing Company, Springfield, Ohio, changed over the impression cylinders of a battery of 8 Cottrell 4-color presses from plain to TIMKEN Bearings. As a result they have been able to step up the speed of these presses from 2,800 to 4,000 sheets per hour. At the same time greater printing accuracy has been secured together with increased dependability and simplified lubrication.

The printing industry is constantly demanding higher printing quality at lower cost—and finding it in presses equipped with TIMKEN Bearings. Hence "Timken Bearing Equipped" is a strong sales point wherever it is found.



8 Budd-built Zephyrs are now rolling on TIMKEN Bearings.
Glide—as you ride a Timken-equipped Train

THE TIMKEN ROLLER BEARING COMPANY, CANTON, OHIO

TIMKEN
TAPERED ROLLER BEARINGS

Manufacturers of Timken Tapered Roller Bearings for automobiles, motor trucks, railroad cars and locomotives and all kinds of industrial machinery; Timken Alloy Steels and Carbon and Alloy Seamless Tubing; Timken Rock Bits; and Timken Fuel Injection Equipment.

Twelve Firemen Overcome In Perfume Shop Fire
The London Evening Free Press
GUNMAN KILLED BY POLICE
Radio Men Baffled by Mystery Airship
SECOND FUGITIVE WOUNDED IN FIGHT
The News and Observer
The Spartanburg Herald
FOES OF COURT BILL PREDICT EARLY DEFEAT
Worst Fighting of War Rakes Madrid
The Star
STOP PRESS
Chillicothe Scioto Gazette
BUTLER FILES FORD OUSTER COMPLAINTS
Kerosene Blast Fatal To Girl, 11, Near Austin
EL PAIS
LOS REBELDES DICEN HABER ROTO EL SITIO DE OVIEDO, EN TANTO LOS LEALES AFIRMAN QUE DOMINAN ALLI
EL MUNDO
SANTALIZ HABIA RESUELTO MATAR A VALERAS DESDE HACE MESES
EL COMERCIO
NUEVAS PRISIONES HICIERON AYER
25 MIL NIPONES HACEN FRENTE A 50 MIL CHINOS
COLAPSO PRESUPUESTAL SI NO SE MODIFICAN IMPUESTOS
UN EJE EVENTUAL LONDRES-ROMA, SIN PERJUICIO DEL EJE ROMA-BERLIN

THE INDELIBLE RECORD OF G-E PERFORMANCE

Exact measurements of speed, acceleration, deceleration, stops, and power consumption, charted by recording instruments, prove that G-E press drive and control performs exactly as specified.

15

THE trend to acquire new pressroom equipment continues. In recent months fifteen newspaper publishers have ordered G-E press-drive-and-control systems.

You, too, can rely upon the General Electric double-motor drive system for co-ordinated performance of the entire press installation. The recent selection of General Electric equipment for the newspapers here pictured, plus the performance of hundreds of other G-E press-drive-and-control systems, is evidence of the superior operation, performance, and flexibility of this system.

The G-E system operates in conjunction with complete installations—presses, reels, tensions, and pasters—manufactured by any press manufacturer.

The Pittsburgh Press
MBRIDGE FIRM DEFIES
ROR BOARD'S TACTICS
North China Crisis 'Settled'
Nanking O.K.'s 'Local Pact'
THE VANCOUVER SUN
Bandit Slain By Police
Mrs. Metcalf's Tragic Tale of Slain Father's Violence and Immorality
VIOLENCE FLARES IN STEEL AREA
PINE BLUFF COMMERCIAL
CHINESE AND JAPS BATTLE AT PEIPING
THE WILLIAMSPORT SUN
COURT BILL TEST WAITS NEW LEADER
MORNING ADVOCATE
Chinese Claim Peace Talk Is Japanese Mask

MORE

PROGRESSIVE NEWSPAPER PUBLISHERS MODERNIZE WITH G-E PRESS-DRIVE-AND-CONTROL SYSTEMS

New Additions to the G-E Roll Call

U. S. and Canada

Baton Rouge, La., *State Times* and *Advocate*. G-E Sales and Service: New Orleans.

Chillicothe, Ohio, *Scioto Gazette*. G-E Sales and Service: Columbus and Cincinnati.

London, Ont., *Free Press*. Canadian G-E Sales and Service: Toronto, Ont.

Pine Bluff, Ark., *Commercial*. G-E Sales and Service: Pine Bluff and St. Louis.

Pittsburgh, Pa., *Press*. G-E Sales and Service: Pittsburgh.

Raleigh, N. C., *News and Observer*. G-E Sales and Service: Raleigh and Atlanta.

Spartanburg, S. C., *Herald* and *Journal*. G-E Sales and Service: Atlanta.

Toledo, Ohio, *Ameryka Echo*. G-E Sales and Service: Toledo and Cleveland.

Vancouver, B. C., *Sun*. Canadian G-E Sales and Service: Vancouver.

Williamsport, Pa., *Sun* and *Gazette Bulletin*. G-E Sales and Service: Philadelphia

Foreign

Havana, Cuba, *El Pais*. General Electric Cubana, S. A., Havana, Cuba.

Quito, Ecuador, *El Comercio*. Guayaquil Agencies Co., Guayaquil.

San Juan, Puerto Rico, *El Mundo*. International General Electric Co. of Porto Rico, San Juan.

Johannesburg, S. Africa, *Star*. South African General Electric Co., Ltd., Johannesburg.

Montevideo, Uruguay, *El Pais*. General Electric, S. A., Montevideo.

It will pay you to call in the G-E printing-equipment specialist—get in touch with the G-E office in your locality. General Electric, Schenectady, New York.

Advantages of the G-E Press-Drive-and-Control System

1. Superior press performance and flexibility of operation, made possible by the broad experience of General Electric. Complete equipment, engineered to the individual requirements of your plant.

2. Greatest degree of safety for pressmen, presses, and electric equipment.

3. Simple and easy to install and operate because of simplicity of design and construction.

4. Low operating cost and maintenance expense because of reliability and sound design.

5. Service from a responsible, reliable manufacturer, available from offices more conveniently located than those of any other electrical manufacturer.

6. Equipment that conserves space, thereby making valuable room available for other purposes.

GENERAL ELECTRIC

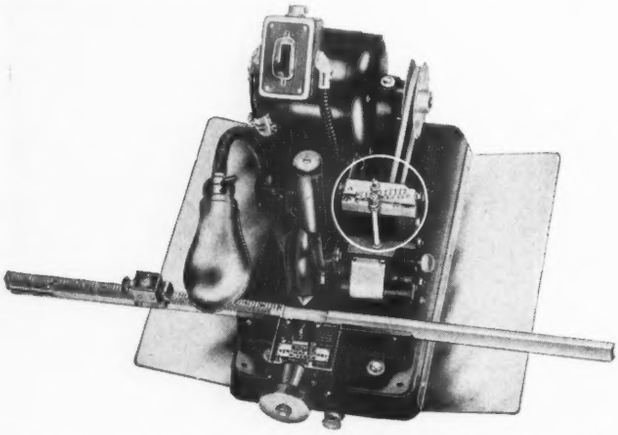
011-258H

Border Stop for Miterer

H. B. Rouse & Company announces a new Ornamental Border Stop for the Rouse Vertical Rotary Miterer.

This new device, it is said, sets the depth of cut of the miterer accurately to standard measures when ornamental designs or borders are being made.

The Ornamental Border Stop on the Rouse Vertical Rotary Miterer greatly simplifies the duplication of



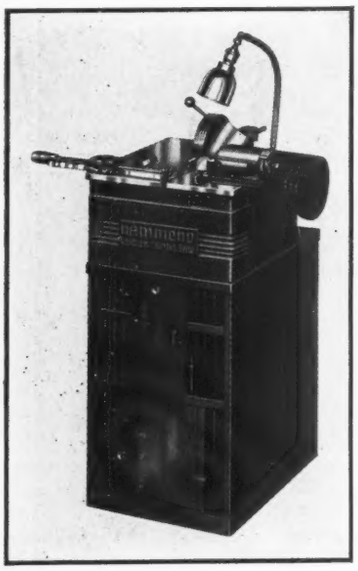
Bird's eye view of Rouse Rotary Mitering Machine table. Within the circle can be seen the new border stop which sets the depth of cut of the miterer to standard measures.

designs, a single movement being necessary to change cut from one depth to another.

The Ornamental Border Stop is standard equipment for all new Rouse Vertical Rotary Miterers. It may be attached to outstanding machines. Complete information is available from the manufacturer.

Two New Glider TrimOsaws

Hammond Machinery Builders announce two new Glider TrimOsaws with ball-bearing tables. Either machine is furnished as a Bench Model or with Strip Material Cabinet which includes a Chip Chute and Buggy enclosed in the cabinet. The illustration shows



View of one of two new models of Hammond Glider TrimOsaws. This particular model is supplied with strip material cabinet in the base.

Model G-22 with the Strip Material Cabinet. This model has a stationary saw arbor. Model G-2 is identical except that it is equipped with a raising and lowering saw arbor operated by a handle and dial calibrated to points.

These two Gliders have the same features as the Model G-3 Glider TrimOsaw which has been offered to the trade for the past two years. The features such as the Ball-Bearing Table, Micrometer Gauge, Single-Action Clamp which cuts down to eight points, Ball Bearing Saw Arbor, and V-belt Drive are incorporated in the new Gliders.

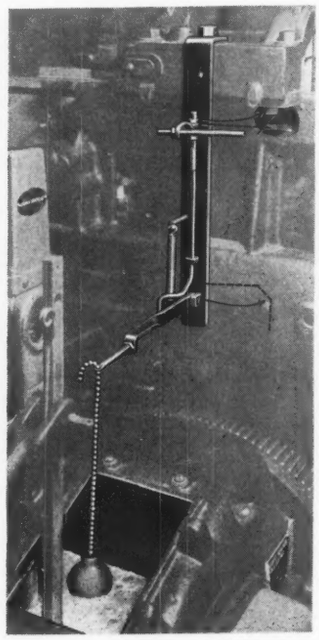
A new descriptive folder may be had by writing to Hammond Machinery Builders, Inc., direct or in care of *Printing* EQUIPMENT *Engineer.*

P-Double-E File No. 1Z.

Metal Pot Metal Level Control

A Metal Pot Metal Level Control, as is shown in the accompanying illustration, has been announced by the Linotype Parts Company. This new device is applicable to Intertypes and Linotypes. The control device operates automatically when the metal level in the pot is lowered to a designated point, at which time the machine is automatically stopped. Before the operator can continue his work, additional metal must be supplied in the pot crucible.

An adjustable float is set at a level in the pot crucible which would be just below the normal metal level. If metal reaches the float level, a trip and saftey latch from



View of Linotype Parts Company's new Metal Pot Metal Level Control which automatically arrests a Linotype or Intertype until the metal supply in the crucible has been replenished.

which a pin extends is released. This engages the elevator transfer slide and stops the machine. The operator or machinist releases the safety latch with a finger; feeds the pig, and resumes operation.

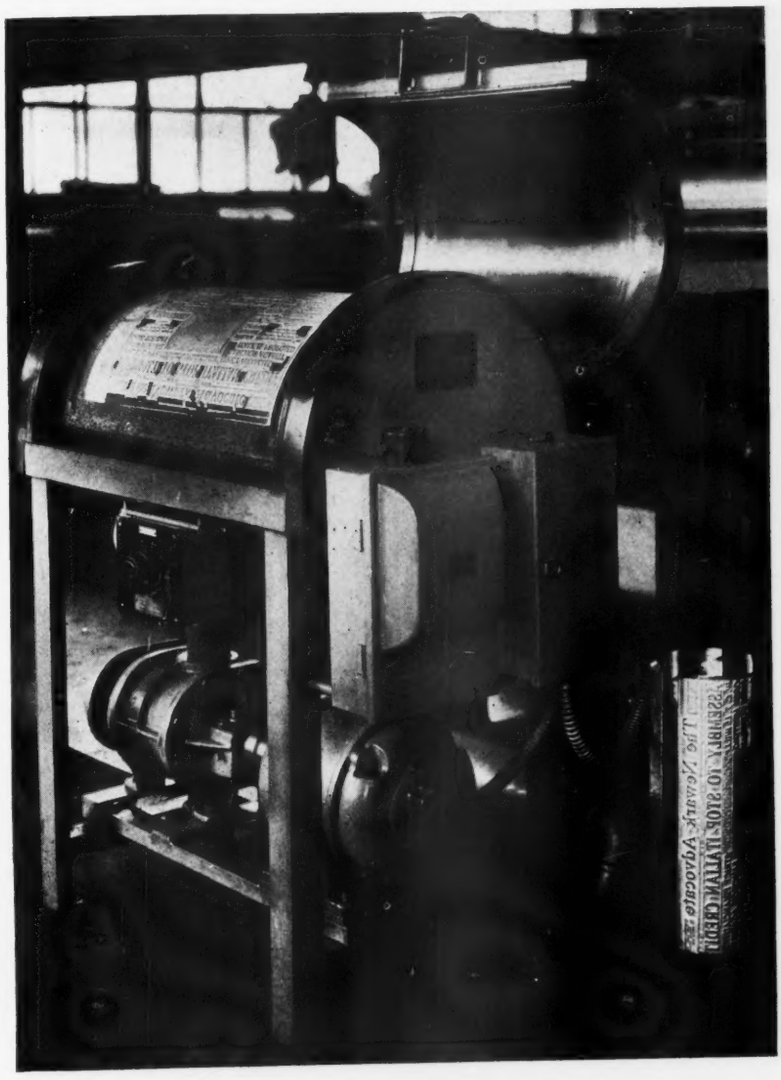
The bracket holding the float control and machine-stopping mechanism is mounted back of the first elevator slide guide and is held in position by the center guide screw.

P-Double-E File No. 1G9.

Clipper Compound

Those associated with the Clipper Products Company state that Clipper Compound No. 3-51 G.A., is a harmless cleaner in paste form which is to be dispersed in hot water for most cleaning purposes. The compound may be used in photoengraving departments for removing all types of negatives from glass and celluloid and for removing ink, dragon's blood, engraving enamel, dirt and so on from engraving plates. It may also be

NEW DEGREE OF PERFORMANCE



The **Stahi Junior Former** for the smaller city daily newspaper, gives a **Remarkable New Performance.** It will be a revelation to stereotypers who appreciate **a good looking plate**—free from irregular printing contour. It is even more **economical to operate** and maintain than "hobo" scorchers. Junior Formers save valuable production time. **Examine this Astonishing Junior Former**—and then you will know how wise it is to choose one.

STAHI NEWSPAPER SUPPLY COMPANY, INC.

417 OREGONIAN BLDG.
PORTLAND, OREGON

1020 CROCKER STREET
LOS ANGELES, CALIF.

538 So. CLARK ST.
CHICAGO, ILLINOIS

AGENCIES:

GOSS PRINTING PRESS COMPANY, CHICAGO, NEW YORK, SAN FRANCISCO
CERTIFIED DRY MAT CORPORATION, No. 9 ROCKEFELLER PLAZA, NEW YORK
DUPLEX PRINTING PRESS COMPANY, BATTLE CREEK, MICHIGAN
WOOD FLONG CORPORATION, HOOSICK FALLS, NEW YORK
BURGESS CELLULOSE COMPANY, FREEPORT, ILLINOIS
R. HOE & COMPANY, NEW YORK, BOSTON, CHICAGO, SAN FRANCISCO
WOOD NEWSPAPER MACHINERY CORPORATION, NEW YORK, N. Y.

Foreign Agencies:

GOSS PRINTING PRESS COMPANY OF LONDON, ENGLAND
A. M. CARNEIRO & COMPANY, NEW YORK, N. Y.
TORONTO TYPE FOUNDRY COMPANY, LTD., TORONTO, MONTREAL, WINNIPEG, CANADA

used for cleaning press beds, ink fountains, printers' rollers and for metal press parts which can be immersed in the cleaning tanks.

The solution made from Clipper Compound is said to be harmless to workers and their clothing. The hands may be washed in the solution and articles may be taken from the solution with the bare hands. The Compound is said to be non-inflammable and non-explosive.

INTERTYPE MATRIX CUTTINGS

Among the most recent two-letter 24-point matrix combinations announced by Intertype Corporation is Cairo and Cairo Bold as shown below.

2-Letter Mats
2-Letter Mats

Hot Top Enamel Remover

CLIPPER No. 724 liquid is used in engraving plants in placed of dangerous chemicals to remove hot top enamel from copper plates. Several hours of grinding with pumice are entirely eliminated. It is non-explosive and non-inflammable and is claimed harmless in every manner.

For use, the solution is placed in any type of tray or container (except aluminum) and heated to a temperature of 175 deg. After 15 minutes the hot top enamel will be completely removed with no harm to the copper plate. The plate is then removed and rinsed in water.

The solution can be used repeatedly and will not become rancid. The solution only weakens with continued use.

P-Double-E File No. 2E22.

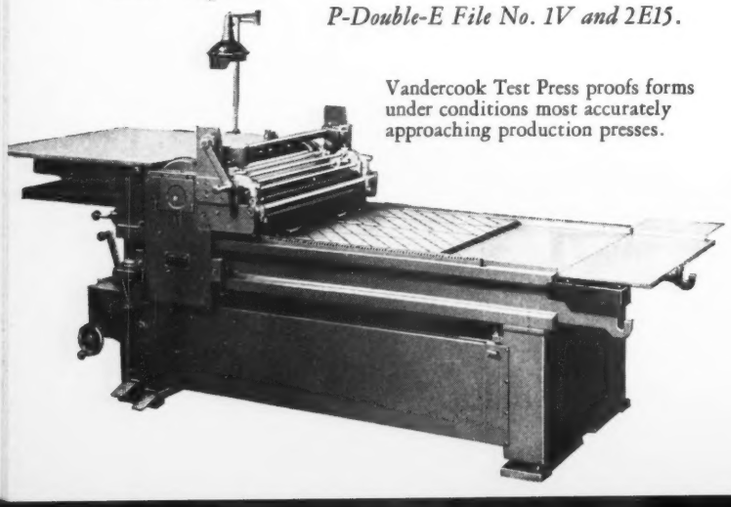
Vandercook Proof Press

The new 32 in. by 30 in. Vandercook Test Press is designed for proving forms under conditions that most accurately approach those of the production presses. The No. 232 Vandercook Test Press takes a form 32 in. by 30 in. It is big enough to prove forms in chases of most of the high speed automatic presses. The No. 232 Vandercook Proving Machine is available for either hand or power operation.

No. 232 and No. 232P Specifications: Sheet size, 32½ in. by 30 in.; Plate or Form size, 31½ in. by 28 in.; Two Form Rollers, 4½ in. diam.; 31½ in. face; Core 3 in. diam.; Two Fountain Vibrator Rollers, 2½ in. diam.; 28¼ in. face.; Core 1⅜ in. diam.; Ink Drum Motor ¼ h.p.; Impression Cylinder Motor ½ h.p.; floor space 3 ft. 9 in. by 10 ft. 6 in.; net weight Hand Presses, 4000 lbs.; net weight Power Press, 4450 lbs.

Complete information may be obtained by writing Vandercook & Sons direct or in care of *Printing* EQUIPMENT *Engineer.*

P-Double-E File No. 1V and 2E15.

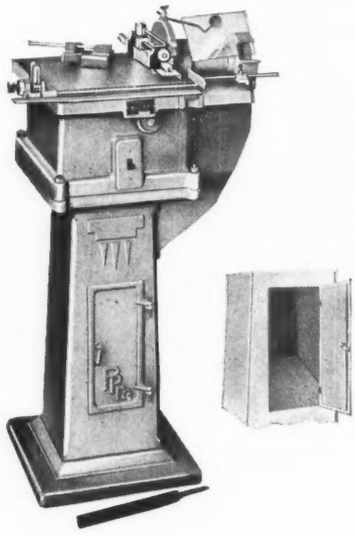


Vandercook Test Press proofs forms under conditions most accurately approaching production presses.

Somitrim Saw-Trimmer and Miterer

Precision Printers Equipment Company offers the Somitrim Saw-Trimmer and Miterer with or without pedestal. The working top of this saw-trimmer is 18 in. by 18 in. A rack having 72 pica capacity is furnished regularly with the saw but an extension attachment for cutting and trimming material up to 127 picas by half-points may be obtained if desired.

The work holder permits trimming a 12-point slug down to 10 points. Manufacturer states no fanning is possible. The locking capacity is 5¼ in. A duplex



View of Somitrim Saw-Trimmer mounted on welded steel pedestal. As is shown in the sectional view, the pedestal floor is slanted to facilitate removal of waste products. Pedestal capacity is 650 cu. in.

safety glass visor to protect the eyes is furnished. A saw guard can be thrown back below table level when undercutting or mortising.

The trimmer head integrated driven pulley travels 4500 r.p.m. The saw-spindle is mounted in New-Departure Ball Bearings and the mounting is sealed for life. Maker states the bearings do not require greasing or oiling.

The welded steel pedestal weighs about 50 lbs. and furnishes 650 cu. in. for metal cut-off material. A slanting floor is supplied in the pedestal to facilitate quick removal of the waste products.

P-Double-E File No. 1Z.

NEW SIZES OF ELECTRA

The demand for Linotype Electra, the book face designed for the Mergenthaler Linotype Company by W. A. Dwiggins, has grown so

> HERE is a brief showing of the 9 point size of Linotype Electra with *Italic* and SMALL CAPS. Modern man *cannot be served by a tool that is* just good enough or a little better than pretty good. The good tool

steadily since its introduction, that the Mergenthaler organization now offers it in two new sizes—7 and 9 point.

With the addition of these sizes, Electra with Italic and Small Caps may now be had in the 7, 8, 9, 10, 11, 12 and 14 point sizes.

Improved Countershaft Type Vari-Speed Motor Pulley

Reeves Pulley Co., manufacturer of Reeves variable speed control equipment, has developed an improved design of the Vari-Speed Motor Pulley, countershaft type. The Vari-Speed Motor Pulley unit is mounted on the standard shaft extension of any constant speed

He knows the value of

Certified LOWER TEMPERATURE CASTING

● The able co-ordinator who sits at the Mechanical Superintendent's desk knows that low temperature casts mean clean, uniform casts of maximum printing quality.

He knows that lower temperatures help conserve metal quality, minimizing dross losses and keeping the desired eutectic balance in the alloy.

He knows stereo forces are happier and more efficient when freed from the scorching presence of an over-heated metal supply.

He knows that Certified Mats produce results at definitely lower temperatures, that they mold easily, scorch quickly and preserve a uniform and dependable printing quality in the casts.

For dependable stereotyping, rely on Certified Mats, made in the U. S. A.

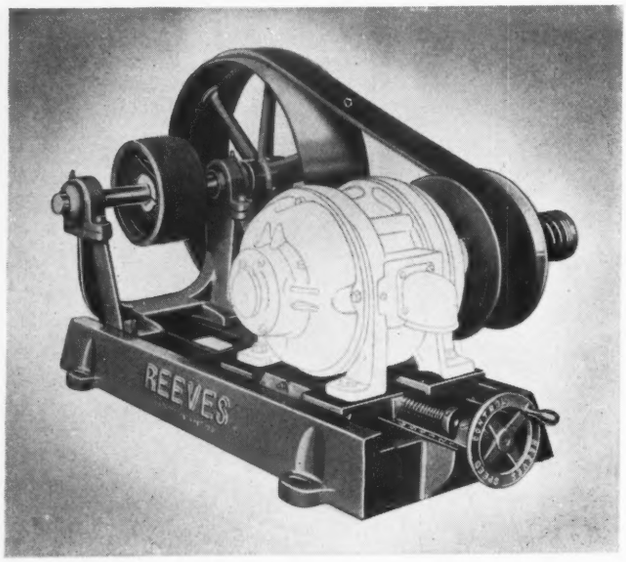
CERTIFIED DRY MAT CORPORATION

9 Rockefeller Plaza, Dept. M — New York, N. Y.

Certified DRY MATS

motor. It forms direct drive from motor to driven machine. Through hand-wheel control, a sliding base on which motor and unit are mounted is moved forward or back, varying the diameters of a set of adjustable disks from which a V-belt runs to the driven machine. Speed changes are made as the belt runs from maximum to minimum disk diam.

For requirements of either unusual speed reduction or speed increase, a countershaft is mounted on a common



base with the rest of the unit. In the former design of this unit, the pulley on the countershaft from which power take-off was made to the driven machine, was mounted on the end of the shaft.

In the new design, illustrated, this pulley may be mounted in the center of the countershaft, between the two bearing housings, thus providing a much more compact, space-saving unit in installations where this factor is important.

While a straight-face pulley is illustrated, power take-off may also be from sprocket, pinion, multiple V-belt, sheave or any accepted drive.

Lubrication Feed-Line Connection for Tight Places

A new type of tubing joint, the Bijur Drive Bushing Connection, has been devised by the Bijur Lubricating Corporation. It provides tubing connections on lubrication feed lines to bearings where space is very limited and there is insufficient room for any type of threaded nut or conventional bushing.

Bijur Drive Bushing Connection: (1) Complete Tubing Connection, Enlarged —(2) Drive Bushing and Tubing—(3) Reamer—(4) Drive Tool.

While adapted especially for use on lubrication feed lines of quite small mechanical units, the new Drive Bushing Connection can be used in combination with any of the standard types of Bijur Automatic Lubricators and Meter-Units, in their various applications.

The new drive bushing joint helps to carry out the enclosed system principle even in tightest places. Tubing as small as $\frac{3}{32}$ in. o.d. can be connected in this manner. For such a size, the diameter of the drive bushing collar is only $\frac{3}{16}$ in.

P-Double-E File No. 5AA.

Improved Kluge Roller Saddles

The Kluge Automatics being shipped from the factory are now equipped with saddles made of aluminum alloys, replacing those formerly made of malleable iron. The engineering principle behind this, state company officials, is the reduction of reciprocating weight to permit a higher speed and a more uniform contact between the micarta roller trucks and the roller tracks and to prevent any possibility of jumping or chattering. In the new saddle, wider range is permitted in the adjustment between the vibrator and the composition rollers.

New construction has been embodied in the bearing surface. Formerly the roller-saddle bearing turned on the pin and not in the saddle. Now the pin turns in the saddle bearings proper to give approximately twice

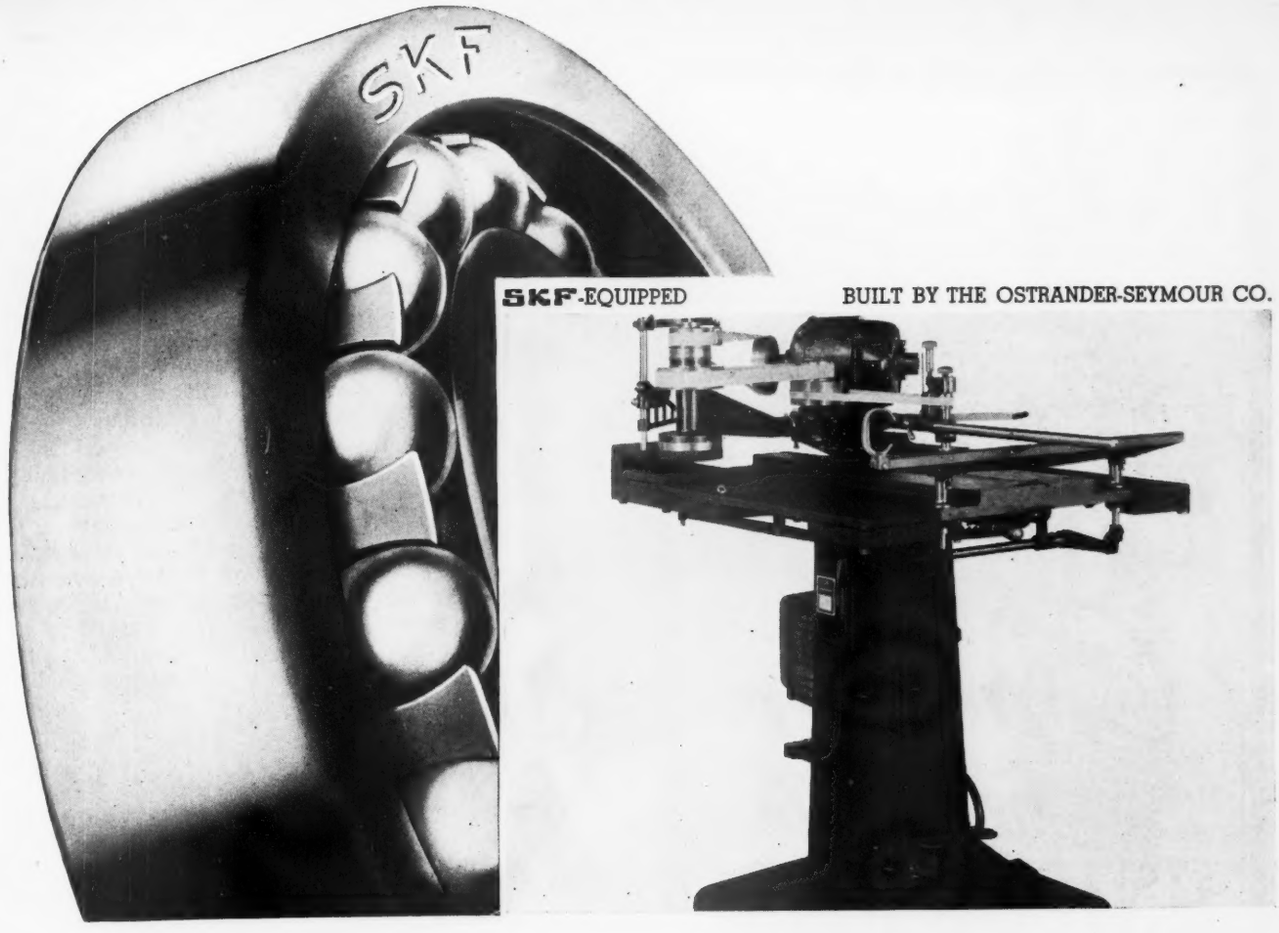
View of Brandtjen & Kluge ink distributing mechanism equipped with aluminum saddles.

the wearing surface. In addition to this, the aluminum alloy saddles are now fitted with tempered steel bushings in contact with a steel pin which has been hollowed out to permit oiling directly to the bearing.

The roller rods, which have always carried an oil reservoir, have been redesigned to obtain a greater oil capacity and further assurance of proper lubrication of the saddle rods under all conditions.

Usually, the modern trend is toward the development of automatic machinery, state Brandtjen & Kluge officials in speaking of their products, particularly in the printing equipment field, but this company has been presented with a problem which has a tendency in the other direction. With automatic platen press equipment, they state, it is essential to have the sheet under perfect control from the time it leaves the magazine until it is placed in the jogger. In hand-feeding a press, there is an interval between the feeding operation and the closing of the grippers when the sheet is lying free. On the Kluge Automatic the grippers hold on to the sheet until the delivery fingers contact it.

In some plants the Kluge Press is called upon to print some jobs that must be hand-fed. To meet this contingency, the Kluge plant has produced an auxiliary gripper cam for hand feeding which can be substituted for the regular cam gripper by the removal of one nut.



20,000 R.P.M. ON A ROUTER NEEDS THE ACCURACY OF SKF

WHEN OSTRANDER-SEYMOUR designed this Heavy Duty Style K Routing Machine for accurate work at 20,000 R.P.M., they insured it against bearing trouble. For they laid in nine SKF Ball Bearings on vital moving parts—another way of saying they made certain of maintained accuracy and dependable performance at high speeds.

Not only on routers, but on huge presses, typesetting machines, conveyors, etc., SKF's conform to the most exacting specifications of the modern printing plant . . . bring printing equipment up to 1937 standards. They have long life, never need adjustments, and retain lubricant for long periods. If you want the right bearing in the right place, specify SKF.

MORE THAN
1200
TYPES AND SIZES
Industry comes to SKF for unbiased bearing counsel because SKF makes practically all types of anti-friction bearings.

3941

SKF INDUSTRIES, INC., FRONT ST. & ERIE AVE., PHILA., PA.

SKF

BALL AND ROLLER BEARINGS

Compare their
UNIFORMITY

We've built a great business and a 22-year reputation for quality around that little slogan "Always Uniform" . . . . . All over the nation, seasoned users of dry mats have chosen Wood, the all time favorite for uniform shrinkage, clean casting, plasticity, stay back and durability. Interested in trouble-proof casting? Order a free sample batch today!

WOOD DRY MATS

Always Uniform

WOOD FLONG CORP.
HOOSICK FALLS, NEW YORK

Master Craftsmen make them for Master Craftsmen

Books Received

York Trade Compositor

IT may seem odd that the *York Trade Compositor* should be discussed at all under this departmental heading but we just want to mention that this is one of the choicest morsels received at this office. The *York Trade Compositor* has been delivered to the writer for over three years. In all that time no two copies have been exactly alike in typography. While retaining the same general format it is amazing to note the wide range of typography used from month to month all within the same limited page area. Just as resourceful is the range of the editorial content of the *York Trade Compositor*. The comments all are essential to the general business of printing production and printing profit. This little publication must be a profitable undertaking since it is now in its seventh year of publication. If you have not heard of the *York Trade Compositor*, we might mention it is a house organ published by the York Composition Company in York, Pa. Phil Mann, the head of the institution, is the guiding spirit.

Typographer's Desk Manual

A NEW BOOK, *Typographer's Desk Manual*, has just been published. The book has been prepared by Eugene de Lopatecki, instructor in layout and design, New York Employing Printers Association. The reason for the creation of the manual is well expressed by the author when he states "It has long been felt that the materials of typographic design should be made available for the typographer's use in some form of presentation which would combine the products of all important type founders in an accessible scheme; in a single volume, designed as a working tool rather than simply a book of reference."

The author's analysis of advertising typography is complete. The chapter on copy fitting and type measuring defines exactly and gives instructions for understanding the manipulation of copy into type. The subdivisions in this chapter are: Length of Line, Set Width of Type, Casting Copy, Size of Type, Typical Copy Fitting Problems, Resetting Copy Already Printed, Short Cuts in Copy Fitting, Areas Vary With Different Faces and Quick Preliminary Copy Estimating.

A valuable feature of the book consists of an analysis of a great number of type faces in use at the present time. The information given with respect to each type face consists of its Tonal Intensity, Characteristics peculiar to each face, characters per pica, basic unit of measurement, hints on using, when to use, faces with which it may be combined, accessories, copy for which suitable and availability. This feature of the book alone should make it worth the price.

Typographer's Desk Manual, By Eugene de Lopatecki. Cloth bound, size 9 in. by 12 in. Price $3.50. The Ronald Press Co., 15 E. 26th St., New York, N. Y.

The Year Book

THE Year Book produced by students under the supervision of instructors during the fifteenth session of the London School of Printing is, as usual, an excellent piece of work. Incorporated in the book are specimens of layout and typography, letterpress printing, both plain, four-color and monochrome work,

and a section done in lithography. A section titled by what the English are pleased to call "Jobbing Work," demonstrates a variety of letterheads, general job work and publicity cards. The balance of the book consists of general institutional information and a number of lectures given by men prominently identified with the printing industry in England. The lecture "Ramblings of a Printer in U. S. A." by Fred Ferris, Manager Messrs. J. Weiner, Ltd., is an extremely interesting account of visits paid by Mr. Ferris to some American printing and manufacturing plants. The Englishman's appraisal of the American and his methods is refreshing.

The work of the London School of Printing as evidenced by the current Year Book is most thorough. The design, composition and printing is high grade in every respect.

OPENS NEW OFFICE

Cutler-Hammer, Inc., announces the appointment of Joseph Gardberg as manager of a new office in New Orleans, La. Mr. Gardberg is a graduate of Georgia Tech. According to G. S. Crane, vice president in charge of sales, he is familiar with the company's line of electric control equipment, safety switches and electrical apparatus.

Joseph Gardberg, manager of new office for Cutler-Hammer in New Orleans.

The new office, which was opened September 1, will be located at 539 Gravier St. The office will operate under the jurisdiction of A. C. Gibson of Cutler-Hammer's Atlanta office.

MRS. HARRIS PASSES

Mrs. Minnie Harris, a leader in the woman's suffrage movement in Warren, O., two decades ago, whose husband Alfred F. Harris is chairman of the board of the Harris Seybold Potter Company died August 24, at her residence, Hotel Alcazar, Cleveland. Mrs. Harris was born in Warren and was active there in women's welfare and social groups for more than 25 years. She became widely known for her work in the suffrage movement. Her husband and a son, Alfred Stull Harris, Vice President of the Harris Seybold Potter Company survive.

SPIRAL BINDING EXHIBITION

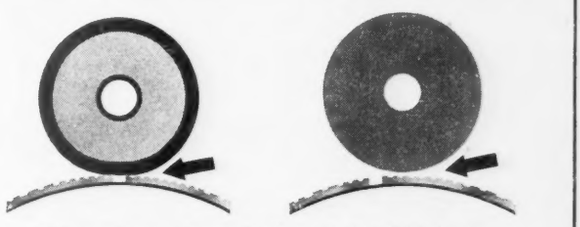
Spiral Binding Company is conducting a contest and exhibition of specimens of various kinds of advertising or general printed matter bound with Spiral or Kamet Loose Leaf binding, bound between September 1936 and September 1937. All entries must reach the Exhibition Committee before September 17, 1937. No entry fee is charged.

The 1937 Spiral Binding Exhibition will be held in suitable galleries in New York early in October, 1937. Subsequently, the exhibition will travel to Chicago.

Gold, silver and bronze medals and cash prizes will be given winners in several classes.

A jury of awards has been selected from the ranks of outstanding designers, bookbinders and advertising experts.

Here's the Roller That's Setting New Records in Newspaper Plants



Due to correct softness, the Dayco Roller yields in going over the cylinder gap and high spots of the plate. This prevents the jumping which occurs with hard rollers. The plasticity of Dayco Rollers also overcomes skidding, slipping, and uneven inking.

DAYCO NEWSPAPER ROLLERS COMBINE CORRECT PLASTICITY WITH GREAT DURABILITY

Dayco Rollers are so tough that they can be as soft as desired and still give an unprecedented number of impressions without readjustment or reconditioning. Because of their correct plasticity, they eliminate roller jumping. They distribute ink uniformly at top press speeds. They give better printing results. They reduce operating and roller costs.

Being impervious to inks, Daycos are not corroded and swollen by the oils which inks contain. Nor are Dayco Rollers affected by heat and humidity. They do not soften and expand in the hottest weather —do not harden and shrink in the coldest weather.

Dayco Rollers are built for every type of press and every class of printing. Tell us what stocks you have on hand for rebuilding and we'll give you complete information about getting them made up into Daycos for your specific requirements.

Remember, there is only one patented sleeve-type roller—DAYCO! Insist upon the genuine.

THE DAYTON RUBBER MANUFACTURING CO.
Newspaper Division, Dayton, Ohio.

Dayco
THE ORIGINAL SYNTHETIC D RUBBER NEWSPAPER ROLLER
THE ALL-PURPOSE ROLLER FOR FORM, DISTRIBUTOR, DUCTOR, ETC.
COPYRIGHT, 1937, THE DAYTON RUBBER MFG. CO.

IMPERIAL COVERS THIS BLACK DIAMOND FRONT

LABOR BOARD ASKED TO END SILK STRIKE HERE
SUNDAY INDEPENDENT
ARREST REPORTED IN BROSKE MURDER
LAST EDITION
THE EVENING NEWS
WEATHER
ARREST SUSPECTS IN BROSKE DEATH
Msgr. Smoulter
BLACK IS
JAPS PLAN
TO CRUSH
Pickup Wounded
Wilkes-Barre Record
Senate Confirms Black, 63 to 16, For High Court
Home Boosts Farm Tenancy 20 Millions
Jobless Cook's Arrest Solves Trunk Murder
Frenzied Mobs Roam Shanghai As Washington Orders 1,200 Devil Dogs to War-Torn City
TIMES
WILKES BARRE
LEADER
FINAL MARKETS
SHELL HITS U. S. SHIP; SAILOR KILLED
CUT IN FREIGHT RATES ON COAL IS ORDERED

FROM the midst of the Pennsylvania coal fields, Wilkes-Barre supplies American homes and industries with fuel for power and heat.

Its 86,000 citizens look to the News, the Record, the Times-Leader and the Sunday Independent for information about local, national and international affairs.

The publishers of these four papers rely on Imperial type metal and the Plus Plan for a dependable metal supply and lower yearly metal costs. They base this trust on past experience, for through this experience they know that Imperial metal gives reliable results – clean, sharp impressions and solid body. You too, will find Imperial metal profitable and dependable. Use

Imperial

IMPERIAL TYPE METAL CO.

PHILADELPHIA • NEW YORK • LOS ANGELES • CHICAGO

CLINE ELECTRIC MFG. CO.—NEWS ROLL DATA

CLINE AUTOMATIC TENSIONS — CLINE HIGH SPEED PASTERS

DATA FOR 17¾" X 23 9/16" CUTOFF—32 LB. NEWSPRINT							
ROLL DIA. IN INCHES			30	32	34	36	38	40
ROLL WEIGHT (71" LG.)			1175	1340	1510	1700	1885	2095
PAPER LENGTH IN FEET			18650	21250	24000	26840	29900	33200
NO OF 8 PAGE PAPERS			9520	10850	12250	13700	15270	16950
I.P.H.	CYL.R.P.M	FT.PER MIN	TIME TO RUN OUT IN MINUTES					
30 000	250	981	19	21.7	24.5	27.4	30.5	33.8
35 000	291.6	1148	16.3	18.6	21.	23.5	26.2	29
40 000	333.3	1310	14.3	16.3	18.4	20.6	22.8	25.4
45 000	375	1472	12.7	14.5	16.3	18.3	20.3	22.6
50 000	416.6	1635	11.4	13	14.7	16.4	18.3	20.3
55 000	458.3	1800	10.4	11.8	13.4	15	16.6	18.5
60 000	500	1963	9.5	10.8	12.3	13.7	15.2	16.9

500 sheets of 24"x36" Standard Newsprint weighs 32 lbs. An inch length of 40" diameter roll of 32 lb. paper weighs approximately 29½ lbs.

CLINE ELECTRIC MFG. CO.—NEWS ROLL DATA

CLINE AUTOMATIC TENSIONS — CLINE HIGH SPEED PASTERS

DATA FOR 16 7/8" X 22¾" (22.716") CUTOFF – 32 LB. NEWSPRINT							
ROLL DIA. IN INCHES			30	32	34	36	38	40
ROLL WEIGHT (61½" LG.)			1120	1270	1440	1610	1790	1990
PAPER LENGTH IN FEET			18650	21250	24000	26840	29900	33200
NO OF 8 PAGE PAPERS			9840	11210	12660	14160	15770	17500
I.P.H.	CYL.R.P.M	FT.PER MIN	TIME TO RUN OUT IN MINUTES					
30 000	250	948	19.7	22.1	25.3	28.3	31.5	35
35 000	291.6	1106	16.9	18.9	21.7	24.3	27	30
40 000	333.3	1263	14.7	16.6	19	21.2	23.7	26.3
45 000	375	1420	13.1	14.7	16.9	18.9	21	23.4
50 000	416.6	1580	11.8	13.2	15.2	17	18.9	21
55 000	458.3	1738	10.7	12	13.8	15.5	17.2	19.1
60 000	500	1895	9.8	11	12.7	14.2	15.8	17.5

500 sheets of 24"x36" Standard Newsprint weighs 32 lbs. An inch length of 40" diameter roll of 32 lb. paper weighs approximately 29½ lbs.

CLINE ELECTRIC MFG. CO.—NEWS ROLL DATA

CLINE AUTOMATIC TENSIONS — CLINE HIGH SPEED PASTERS

DATA FOR 16 7/8" X 21½" CUTOFF – 32 LB. NEWSPRINT							
ROLL DIA. IN INCHES			30	32	34	36	38	40
ROLL WEIGHT (61½" LG.)			1120	1270	1440	1610	1790	1990
PAPER LENGTH IN FEET			18650	21250	24000	26840	29900	33200
NO OF 8 PAGE PAPERS			10390	11880	13400	15000	16700	18550
I.P.H.	CYL.R.P.M	FT.PER MIN	TIME TO RUN OUT IN MINUTES					
30 000	250	896	20.8	23.8	26.8	30	33.4	37
35 000	291.6	1045	17.9	20.4	23	25.7	28.6	31.8
40 000	333.3	1194	15.6	17.8	20.1	22.5	25	27.8
45 000	375	1343	13.9	15.8	17.9	20	22.2	24.7
50 000	416.6	1493	12.5	14.3	16.1	18	20	22.2
55 000	4583	1642	11.4	13	14.6	16.3	18.2	20.2
60 000	500	1790	10.4	11.9	13.4	15	16.7	18.5

500 sheets of 24"x36" Standard Newsprint weighs 32 lbs. An inch length of 40" diameter roll of 32 lb. paper weighs approximately 29½ lbs.

Shown here is a miniature reproduction of a card being distributed by the Cline Electric Manufacturing Company giving news roll data which is of interest to newspaper mechanical and production executives. Copies of the card may be obtained from the Cline Electric Manufacturing Company.

DEATH OF GEORGE R. BOTT

George Robert Bott, chief engineer and a director of Norma-Hoffman Bearings Corporation, Stamford, Conn., died of heart failure on Saturday, August 14, at his summer home in New Canaan, Conn. He was fifty-eight years old and had been a resident of Stamford, Conn., for some thirteen years. One of the pioneers in the bearing industry, Mr. Bott held numerous patents on anti-friction bearings and other mechanical devices. He is survived by two sons—George R. Bott, Jr., and Alan Bott—and by his brother William Bott, of Columbus, O.

APPRENTICE TRAINING

A resolution adopted at the SNPA convention in Hot Springs authorized an investigation of apprentice training in all departments of the daily newspaper. President Dealey has appointed a special committee to make this investigation. The committee is comprised of: Chairman, E. C. Davis, Beaumont (Tex.) *Enterprise* and *Journal*; Vice-Chairman, Walter C. Johnson, Chattanooga (Tenn.) *News;* J. L. Horne, Jr. ,Rocky Mount (N. C.) *Telegram;* J. S. Mims, Tampa (Fla.) *Tribune*, and R. F. Hudson, Montgomery (Ala.) *Advertiser*.

Emergency Leader Rule

PERHAPS you would like to make some hyphen-leader rule in your composing room in case you happen to get caught short with a printing job and do not have a matrix for casting it. Here's how Virgil J. Easterday, chief composing room machinist of the Danville (Ill.) *Commercial-News*, solved the problem when Composing Room Superintendent John Cope put it up to him.

The device for notching the rule consists of an assembler star wheel pinion assembly and a matrix delivery

Here's how Virgil Esterday makes some leader rule in an emergency for Composing Room Superintendent John Cope of the Danville (Ill.) *Commercial-News*.

belt idle pulley with stud mounted the proper distance apart on an ejector blade so that when a piece of the strip rule is drawn between the pinion and pulley, the pinion teeth will indent the printing face of the rule.

In many printing plants may be found one of the old-style detachable blades used on line-composing machines. A 30-em, 8 pt. blade in this instance served as a base plate upon which Mr. Easterday mounted the pinion and the pulley mentioned above.

In the illustration, Mr. Easterday is shown drawing a length of rule between the pinion and pulley. The pulley is mounted in a slotted hole to permit adjusting the pulley the proper distance from the pinion in order to indent rule.

KLUGE DEMONSTRATION

C. D. Lackore, Chicago manager for Brandtjen & Kluge, Inc., is conducting a demonstration of the Kluge Automatic Press at Louisville, Ky., from Monday, September 13, to Saturday, September 25.

The demonstration will be held at the Hotel Henry Watterson, Walnut and Fourth Sts., Louisville, from 9 a. m. to 9 p. m. daily. The 10 by 15 and 12 by 18 Kluge presses will be shown and a large attendance is expected from the printers of central Kentucky and Southern Indiana.

Delegates to the International Typographical Union in convention at Louisville from September 11 to 17 are invited to attend.

Join the parade of users of VULCAN products
You'll be in good company, for a large proportion of Vulcan customers are among the leaders in their various fields.
MAKEREADY BLANKETS
for letterpress printers
GELASTIC ROLLERS
for letterpress printers
OFFSET BLANKETS
for lithographers
LITHOLASTIC ROLLERS
for offset presses
VULCOLASTIC ROLLERS
for newspaper and magazine presses
CYLINDER PACKINGS
Felt and non-felt blankets, E. D. blankets, draw sheets and underpackings
VULCAN PROOFING COMPANY
58th Street and First Avenue, Brooklyn, N. Y.
608 South Dearborn Street, Chicago
SALES REPRESENTATIVES IN PRINCIPAL CITIES

MAKE
NO MISTAKES

Use Our
New Improved

DE LUXE MONOCORKS

(Sold on Guarantee)

This is the finest printers' blanket ever put on the market for High Class Printing.

Can be used double with our Superior Sateen Draw Sheet or as an under blanket with our Efficiency High-Speed Automatic Felt Blanket.

Use the ORIGINALS

Not IMITATIONS

Known, Sold and Used All Over the World.

New England Newspaper Supply Co.

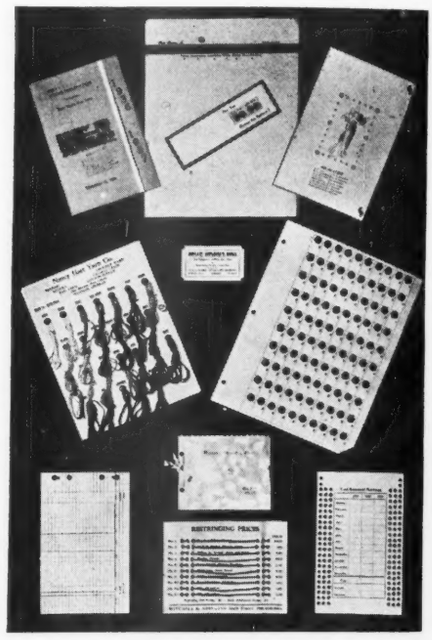
Worcester, Mass.

Challenge Contest Winners

FIRST place in the Challenge Paper Drilling Competition was awarded to the National Printing & Letter Co., Sioux City, Iowa, it has been officially announced by The Challenge Machinery Co., Grand Haven, Mich., donor of the awards. The second award was earned by The Pfeifer Show Print Co., Columbus, Ohio. Third place went to Sloan Brothers Press Corp., Tarentum, Pa., and five honorable mention awards were made to Duplicating Papers, Inc., New York City; Marcus & Co., Philadelphia; Murray Printing Co., Newnan, Ga.; Oriole Printing Co., Baltimore, and Phillips Printery, Riverside, Calif.

Judges were John R. Pippel, Pippel Printery; William Vaxter, Franklin Press, and O. T. Gylleck, advertising manager, The Challenge Machinery Co., all of Grand Haven, Mich.

The winning award was the entrant's own letterhead and a novel business card for one of his customers. The letterhead is modern and distinctive in design and employs drilled holes for decorative purposes.



Miniature reproduction of some of the entries in Challenge Paper Drilling Competition recently terminated. A number of novel entries appear in this illustration. Left center is a drilled card for displaying samples of yarn; right center shows a special loose-leaf page requiring 100 3/8-in. holes per sheet, plus three 3/16-in. holes for binding. This job represented a 25,000 run with a total of 2,575,000 holes. Lower center is shown a card for holding samples of tennis racquet strings. Production figures are 500 cards, 60 holes each or a total of 30,000 holes, including all set-ups, in 1½ hours' time.

At the top of the letterhead is a target with a hole drilled through the bull's eye. Holes are also appropriately placed to emphasize the firm's name, location, phone number, and services, *viz:* "Printing, Multigraphing, Letter Work, Folding, Mailing, Direct Advertising." The business card, produced for an automotive jobber, is a book-fold, coated on the outside in silver and printed in black.

Other outstanding entries among the many received were a card for holding samples of tennis racquet strings (500 cards, 60 holes each; 30,000 holes, including all set-ups, in 1½ hours); 500 factory journal sheets with two holes each, drilled and V-slotted in 10 minutes' time; a card for displaying samples of yarn; a special job requiring 100 3/8-in. holes per sheet, plus three 3/16-in. holes for loose-leaf binding (25,000 run; total 2,575,000 holes); a scalloped-edge booklet; an ingenious method of cutting button hole tags; swatch books containing samples of book cloths; round-cornered letterheads; tie-bound programs, and numerous production records of exceptional calibre.

One printer found an interesting use for the chips from his Challenge Paper Drilling Machine. Called upon to assist in the decoration of lodge rooms, he devised the idea of cutting a stencil and using glue instead of paint or ink. Then he scattered chips from various colors of paper on the lettering before the glue dried. This was done in much the same manner as using a bronzing powder.

FIND IT IN THE
P-DOUBLE-E EQUIPMENT INDEX

JOIN THE MECHANICAL EXECUTIVE REPEATERS

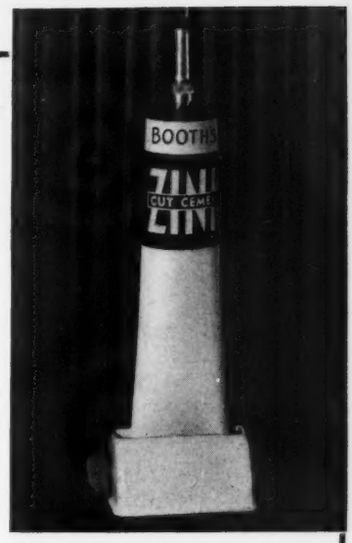
A sure test of the merit of any product is in the repeat orders received by the manufacturers of that product. Composing room and stereotype executive users of Booth's Zink Cut Cement have been re-ordering in increasing quantities. Our customers are like our cement —they stick.

Booth's Zink Cut Cement anchors zinc etchings, copper halftones, electros or stereos to wood or metal base.

Efficiently packaged in a tube—no waste, no muss.

Booth's Green Rubber Keyboard Rolls

to be satisfactory, line-casting machine keyboard rolls must be **resilient.** This is why Booth's Rolls are made from as much pure gum rubber as it is possible to put into a roll. Crepe finished or Corrugated Tread, as you choose. $1.30 per pair. $7.00 per dozen. 55c each in lots of 100.



ZINK CUT CEMENT PRICES in the U. S. and Canada: 75c per large tube; $6.00 per dozen tubes; $5.00 per dozen tubes in gross lots. Stand-A-Lone Holders 2 for 25c, per dozen, $1.00.

E. A. BOOTH RUBBER COMPANY
364 ROCKEFELLER BUILDING · CLEVELAND, OHIO

eye appeal depends on Ink

How the microscope reveals the secret of crisp appearance and clean-cut reading-ease in newspaper text and advertising. See what happens when a sample of body text taken at random from a paper printed with MORRILL NEWS INK is enlarged 15 times. Note how bold and uniform is MORRILL coverage. That creates eye-appeal!

EYE-APPEAL means buy-appeal for your paper – more circulation, more advertising for you . more customers and livelier business for your advertisers. Let MORRILL help you put real eye-appeal into your pages. Give your paper that sharp, clear printing that fairly talks to the reader. Insure the strong, smooth coverage of large type and solids – those clean, vivid halftones – that make your pages sparkle. There's a MORRILL NEWS INK to help you do it – and a MORRILL BRANCH nearby to serve you promptly. Consult the addresses below . . . and get in touch with the Morrill Service Man. His practical advice is yours without obligation.

Modernize with **MORRILL INKS**

GEO. H. MORRILL CO.
Division GENERAL PRINTING INK CORPORATION
100 SIXTH AVENUE • NEW YORK, N. Y.

FACTORIES • Norwood, Mass. • Tacony, Phila., Pa. • Chicago, Ill. • San Francisco, Calif.
BRANCHES • Boston • New York • Philadelphia • Detroit • Chicago • St. Louis Minneapolis • Fort Worth • Los Angeles • San Francisco • Seattle

INTEGRITY and QUALITY

In our opinion there is no quality more essential to the continued success of any business enterprise than the integrity of its word.

However, this is of no avail without the consistent quality of the product or service it has to offer.

During the past twelve years "STAR PARTS" have become known in every nook and cranny in this country and Canada, as well as in foreign lands. The many thousands of friends we have served and the ever widening circle attests to the successful combination of these twin ideals in our dealings with the trade—Integrity and Quality.

But quite apart from these basic ideals we have sought to be progressive. We have brought out practical mechanical improvements in many parts that for years meant the loss of production time in machine operation. And we have done this without the introduction of fads or "doodads."

We wish to take this opportunity to extend to the members of the Southern Newspaper Mechanical Conference our appreciation for their recognition of these efforts as expressed by their continued support, and to offer our sincere wishes for the success of this conference.

Beware of cheap imitations of ACE BELTS. They won't wear as well because they are not made as well.

Ace Belts are the only ones guaranteed for a year's minimum service. They wear longer—and do not stretch.

TRADE ★ MARK

LINOTYPE PARTS COMPANY

NEW YORK
203 Lafayette St.

KANSAS CITY
314 West 10th St.

CHICAGO—318 West Randolph Street
LOS ANGELES—1133 Maple Ave.

SUveneer Ink Specimen Books

Sigmund-Ullman Company, Division General Printing Ink Corporation, has just published three ink specimen books showing the practical application of its line of SUveneer inks for the printer, label maker, carton and container manufacturer.

Each of the three books is made up of representative colors in the new line of inks printed on actual stocks used in their respective fields.

At left is shown in miniature the cover of one of three ink specimen books just issued by Sigmund-Ullman Company, Division General Printing Ink Corporation. At right, the book is open to show the purpose of the ink on the left-hand page. On the right are numerous leaves graduated in size, each of which is printed with all-over coverage of the various colors in the line.

The paper stock in each case is specified by name of the maker, weight and the name of the stock.

The manufacturer states the SUveneer line of inks is a new product of the Sigmund Ullman research laboratories, which give brilliance and luster with one impression. Any hard surface or coated paper is suitable for use with these inks.

The inks may be used on labels, folders, catalog and publication covers and produce a hard, glossy finish with one impression. The inks do not require flooding to produce the high gloss, it is claimed. Spray equipment is recommended for production at maximum press speed. The finish is scratch-proof.

These books are available to readers of *Printing* EQUIPMENT *Engineer*, and may be obtained by writing Sigmund Ullman Company at the main office or any of its offices in various cities.

P-Double-E File Nos. 5W6 and 5W8.

VICE PRESIDENT PASSES

Fred L. Tubbs, vice president of the Miehle Printing Press & Manufacturing Company, passed away on Tuesday, August 3, after an illness of only a week. Mr. Tubbs had been in charge of the Chicago City Sales Office since 1923.

To succeed Mr. Tubbs, William J. McWilliams has been selected. Mr. McWilliams has been with the Miehle Company since 1911 and for many years has been connected with the Main Office Sales Department. He has been transferred to the Miehle Chicago City Sales Office at 53 West Jackson Blvd. to take charge of the letterpress division.

STRATHMORE LEASES OFFICE

The Strathmore Paper Company of West Springfield, Mass., paper manufacturers, has leased for a term of years office space on the seventeenth floor of the Lytton building, 14 East Jackson Street, Chicago. The lease was signed for the company by John D. Zink, vice-president, who made the trip from West Springfield this week. Samuel Pace is in charge of the mid-western sales territory.

According to Zink, the demand for high grade papers has increased greatly during the last year or so, with the larger firms being listed among the heaviest users.

B. & K. DEMONSTRATION

R. J. Powers, Boston Manager for Brandtjen & Kluge, Inc., will conduct a demonstration of the Kluge Automatic Press at New Haven, Conn. from September 18 to October 2 inclusive. The demonstration will be held on the lobby floor of Hotel Carde.

The 10 x 15 and the 12 x 18 sizes of the Kluge will be on exhibit. G. J. Stickley, in charge of Connecticut territory for the firm, will assist Mr. Powers. The demonstration is largely for the purpose of acquainting printers with the many improvements embodied in Kluge construction since it was first put upon the market. Those interested are invited to drop in any time between 9 a. m. and 9 p. m. or to telephone for a special appointment.

ATTENTION SOUTHERN PUBLISHERS
See the LINOGRAPH "5" in Birmingham, Alabama—Sept. 20-21

The already famous Linograph Demonstration Unit will be in Birmingham in connection with the Mechanical Convention of the SNPA in the Tutwiler Hotel, Sept. 20-21, and will be parked adjacent to the hotel at 20th St. at 5th Ave.

Executives of other than SNPA publications are also welcome to visit us for actual demonstration of the exceptional merits of the Linograph "5".

Here's an opportunity to see the very latest development in typesetting machines—an amazingly simple, fast unit that thrills the operator with its light touch, lightning response and ease of adjustment, and pleases the owner with its attractive first cost, low upkeep and high productive capacity.

We're Birmingham Bound

LINOGRAPH CORPORATION
DAVENPORT, IOWA

● Burgess Chrome Mats give you sharper, cleaner reproductions of halftone areas.

A LABORATORY PRODUCT

You Helped Create This Better Mat

Products of outstanding merit are never conceived out of thin air. Instead they result from an intensive desire to correct actual troubles of users . . . and the ability to solve those troubles correctly. Thus you users of stereotype mats played an important part in the design of the Burgess Chrome Mat . . . and in the improvements and technique which Burgess has contributed to the industry. All of this experience is at the service of every mat user . . . to help achieve better printing . . . and lower costs. Just call in a Burgess Technical Man. There's no obligation.

BURGESS CELLULOSE COMPANY - Freeport, Illinois

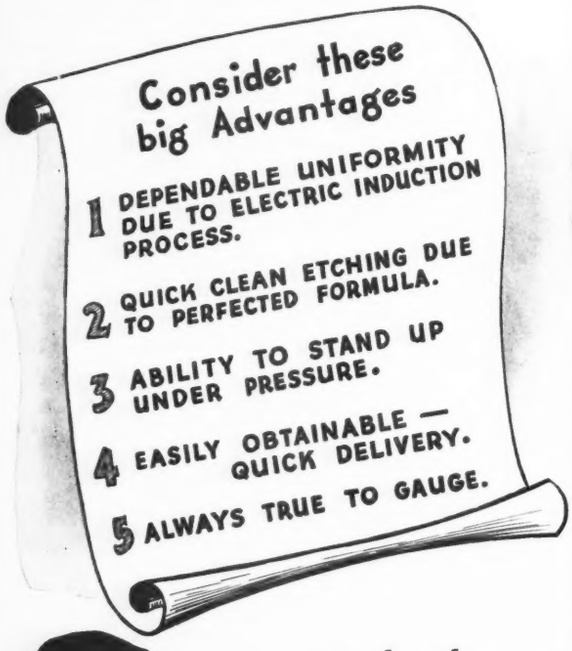
Pacific Coast Representative, RALPH LEBER, 426 Polson Bldg., Seattle, Washington

A301

CHROME MATS

Made in U. S. A.

The engraver gets a break...


Consider these big Advantages
1 DEPENDABLE UNIFORMITY DUE TO ELECTRIC INDUCTION PROCESS.
2 QUICK CLEAN ETCHING DUE TO PERFECTED FORMULA.
3 ABILITY TO STAND UP UNDER PRESSURE.
4 EASILY OBTAINABLE — QUICK DELIVERY.
5 ALWAYS TRUE TO GAUGE.

...with these MODERN METALS

IT BURNS up an expert engraver to have a cut go sour through no fault of his own. Give the men in your shop a "good break" —specify metals of proved uniformity—Zomo Electric Zinc and A-Z Alloy.

These metals are made according to closely controlled formulas. They are melted and cast in the electric induction furnace for perfect blending. They etch clean and use less acid.

Today, more Zomo Electric Zinc goes into the bath than any other metal. Use it for all regular work, and use A-Z Alloy for long direct press runs and heavy mat work.

Leading metal distributors in the United States. Canada and England carry stocks of these metals.

ZOMO ELECTRIC ZINC

A-Z ELECTRIC ALLOY

THESE TRADE MARKS IDENTIFY EVERY SHEET

Patents

All Of Recent Date

Composing Machines:

2,084,539. MACHINE FOR PRODUCING JUSTIFIED LINES OF PRINTING TYPES. Julius Schneider, Munich, Germany. Application July 10, 1935, Serial No. 30,651. In Germany September 25, 1933. 2 Claims. (Cl. 199—80.)

1. In a machine for producing justified lines of printing type, a casting mold of adjustable width, a rotatable matrix wheel adjacent to the mold, a movable feeler cooperating with the wheel, means controlled by movements of the feeler for adjusting the width of the mold to correspond with the particular type which is to be cast, means for separately storing the words of a line as they are cast, means for dividing the amount of necessary justification by the number of word spaces and adjusting the width of the mold accordingly for casting space blocks of proper width, and means for finally assembling the stored words in the form of a line with the cast space blocks between them.

2,085,033. TYPE CASTING MACHINE. Chester A. Macomic, Chicago, Ill., assignor to Macomic Corporation, Chicago, Ill., a corporation of Delaware. Application November 15, 1935. Serial No. 49,978. 14 Claims. (Cl. 199—9.)

1. In a type-casting machine, an inclined matrix bed, matrix selecting and type-casting mechanism associated therewith, a typewriter adapted to control the operation of the matrix selecting mechanism, the matrix selecting and type-casting mechanism being contained substantially within an area bounded by the two horizontal and two vertical planes which pass through the upper and lower ends of the matrix bed.

2,085,139. TYPOGRAPHICAL SLUG CASTING MACHINE. Christian Augustus Albrecht, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Application May 15, 1935. Serial No. 21,506. In Germany May 18, 1934. 6 Claims. (Cl. 22—71.)

6. In a typographical slug-casting machine, the combination according to claim 5, characterized by insulating plates interposed between the clamping plates and the heating element.

2,085,143. TYPOGRAPHICAL COMPOSING MACHINE. Harold A. Burt, St. Albans, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York. Application February 7, 1936. Serial No. 62,748. 20 Claims. (Cl. 199—18.)

1. A typographical composing machine including, in combination, a main magazine and an auxiliary magazine arranged one alongside the other and wherein matrices are stored, individual keyboards for the respective magazines, and means for effecting the release of matrices from one magazine under the control of the keyboard associated with the other magazine, when desired.

2,085,147. JUSTIFYING SPACEBAND. Adelbert L. Child, Ozone Park, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York. Application February 21, 1936. Serial No. 65,018. 14 Claims. (Cl. 199—68.)

1. A justifying spaceband including, in combination, a pair of relatively movable complementary wedge-shaped members presenting inner surfaces in bearing contact, and means for guiding the members in their relative movement, the means in their entirety being offset from the plane of the bearing surfaces.

2,086,547. MATRIX DISTRIBUTOR CONTROL FOR LINE COMPOSING MACHINES. Maurus T. Goetz, Chicago, Ill., assignor, by mesne assignments, to Teletypesetter Corporation, a corporation of Deleware. Application February 16, 1935, Serial No. 6,824. 3 Claims. (Cl. 199—43.)

1. In a line composing machine for selectively assembling and distributing a plurality of classes of circulating matrices, an automatic control unit responsive to signals for selectively releasing for assembly matrices during line composition, a rotatable distributor for moving the matrices during distributive separation, a pair of centrifugally weighted arms rotatable during the movement of the distributor, a spring for urging the arms in opposition to their centrifugal tendency imparted by the distributor, a contact controlling member movable by the spring in one direction and by the weighted arms during their centrifugal tendency in an opposite direction, and means responsive to the contact controlling member for arresting the performance of the control unit.

2,086,627. TYPOGRAPHICAL COMPOSING MACHINE. Francis J. Lynch, Great Neck, N. Y. Application January 28, 1931. Serial No. 511,785. Renewed October 14, 1936. 8 Claims. (Cl. 199—43.)

1. In a typographical composing machine, a U-shaped member including an electrically operated signaling device, an electric circuit, a switch controlling flow of current through the circuit to the signaling device, and a lever mounted on the U-shaped member and automatically controlled by the distributor mechanism of the machine to open or close the switch.

2,088,081. LOW SLUGGING MECHANISM. Charles W. Curle and Theodore C. Curle, San Francisco, Calif. Application December 21, 1935. Serial No. 55,632. Renewed January 11, 1937. 3 Claims. (Cl. 90—19.)

3. In a device, for use with a line casting machine, of a channel capable of receiving a slug discharged from the line casting machine, a movable roller in alignment with the path of movement of the slug through the channel, a rotary cutter mounted in close proximity to the roller, means carried by the roller for effecting a depression of the cutter when the roller is elevated, and spring means for normally maintaining the cutter in elevated position out of the path of movement of the slug.

2,088,989. TYPOGRAPHICAL COMPOSING AND CASTING MACHINE. Edgar H. Atkins, Richmond, Va., assignor to Mergenthaler Linotype Company, a corporation of New York. Application September 20, 1935. Serial No. 41,351. 10 Claims. (Cl. 199—62.)

1. In a slug casting machine, the combination of a line transporter, means for varying the casting position of the transporter, slug trimming knives, means for cleaning the knives, operative connections between the transporter and the cleaning means for actuating the latter, and automatically controlled means whereby the extent of the knife cleaning action may be kept uniform regardless of the casting position of the transporter, the means including a multiplying device for imparting a full stroke to the knife cleaning means when the transporter fails to partake of a full stroke.

2,090,028. TYPOGRAPHICAL MACHINE. Harold A. Burt, St. Albans, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York. Application August 29, 1935. Serial No. 38,397. 36 Claims. (Cl. 199—18.)

Patent Papers

Printed copies of patents are furnished by the United States Patent Office at 10 cents each. Address the Commissioner of Patents, Washington, D. C., and enclose 10 cents for each patent paper wanted.

1. In a typographical machine, the combination of a channeled magazine containing a font of matrices divided into lower-case, large-cap, and small-cap groups, respectively, a main keyboard comprising alphabet finger-keys each bearing a single index character as well as non-alphabet finger-keys each bearing two unlike index characters, and intermediate mechanical devices adjustable to connect certain alphabet finger-keys to any desired one of the three matrix groups to the exclusion of the others and certain non-alphabet finger-keys to either one of two of the matrix groups to the exclusion of the others.

Feeding, Folding, Delivery:

2,084,318. PAPER FEEDING MECHANISM. Francisco Campos, Paris, France. Application November 1, 1934. Serial No. 751,102. In Great Britain November 1, 1933. 5 Claims. (Cl. 197—128.)

1. A paper-feeding device comprising in combination, means for feeding a duplex sheet of record paper into a printing mechanism in a direction opposite to that of normal feeding, means for separating the duplex sheet to receive a duplicating medium, the means comprising a dividing element positioned adjacent an ink ribbon to cause the upper and longer fold of the duplex sheet to pass above the dividing element, and above the ink ribbon while the lower and shorter fold passes below, and means for feeding the sheet into printing position in one direction and out of printing position in the opposite direction.

2,085,592. FEEDING MECHANISM FOR PRINTING PRESSES. Alexander T. Koppe, New York, N. Y., assignor to General Printing Ink Corporation, New York, N. Y., a corporation of Delaware. Application January 11, 1934. Serial No. 706,188. 39 Claims. (Cl. 271—28.)

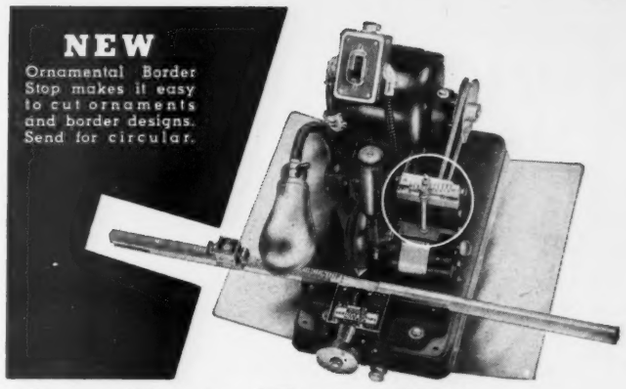
1. The combination in feeding mechanism for printing presses, of means for supporting a paper sheet, and a series of suction cups having a continuous path of travel and spaced apart along the path to engage the sheet at one point along the path to move it from the supporting means, the cups being movable transversely to the path independently of each other.

2,085,612. SHEET SEPARATING DEVICE. Georg Spiess, Leipzig, Germany. Application February 8, 1936. Serial No. 63,027. In Germany October 22, 1935. 10 Claims. (Cl. 271—27.)

1. Sheet separating device for sheet-feeding machines, comprising separating means engaging the rear of the pile of sheets including a nozzled separating suction member, a suction conduit for the member, an airpump connection withthe member, the part of the sheet sucked up by the separating member being automatically lifted by the suction force arising in the conduit and a cylinder upon closure of the suction opening by the sheet and the vacuum produced in the conduit during the sucking up of the sheet effecting the tipping of the suction member, a separating blower and pile feeler, a lifting bar extending in the direction of feed and operating linkages connecting the suction member and the separating blower and pile feeler with the lifting bar for raising the suction member together with the sucked-up part of the sheet, swinging the separating blower and pile feeler into operative position, moving the suction member to deliver the sheet and returning the blower and the suction member.

2,085,889. WEB ROLL CONTROLLING DEVICE FOR PRINTING MACHINES. Harry V. Ball, deceased, late of Bedford, Mass., by Lillian C. Ball, administratrix, Bedford, Mass., assignor, by mesne assignments, to R. Hoe & Co., Inc, New York, N. Y., a corporation of New York. Application December 7, 1934. Serial No. 756,450. 14 Claims. (Cl. 242—75.)

10. In a web tensioning mechanism for controlling a web roll from which a web is being fed to a printing machine, a movable support having a driven belt thereon engaging the peripheral surface of a web roll, a lever member, a variable force applying means adapted to rock the lever member, a reduction leverage applied between the lever member and mov-



Rouse Vertical Rotary Miterer is . . .

More THAN A *time saver*

• It cuts right and left miters direct from strips faster than any other method.

In addition, the **NEW** Ornamental Border Stop facilitates the cutting of hundreds of modern and interesting designs and borders from rule strips.

Complete information, sample border, and prices will be mailed upon request. Write now.

H. B. ROUSE & COMPANY
2217 North Wayne Ave., Chicago, Ill.

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EDES SUPERFINE QUALITY ZINC

ZINC

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Stocks Carried by the Following Representatives

John H. Heimbuecher Metals Co., 514 No. Third St., St. Louis, Mo.
Gazzolo Drug and Chemical Co., 119 So. Green St., Chicago, Ill.
E. H. Walker Supply Co., Printcraft Bldg., Washington, D. C.
Selby Mohr, 883 Mission St., San Francisco, Cal.
Thompson-Hayward Chemical Co., 2228 Blake St., Denver, Colo.
Thompson-Hayward Chemical Co., 909 2nd St. So., Minneapolis, Minn.
Metzger Photo Supply Co., 1091 So. Main St., Akron, Ohio
G. C. Dom Supply Co., 125 East Pearl St., Cincinnati, Ohio
C. S. Illingworth, 49 Springville Avenue, Buffalo, New York

UNIFORM TEXTURE STANDS UP UNDER MATRIX PRESSURE

IMPROVED DESIGN *for Models* L, 5, 8, 14, 18, 19, 25, 26, etc.
MAGAZINES

● Top plate of duralumin, bottom plate of brass. Partitions, bars and braces of tempered aluminum. Combines best features of other designs — weight saving, ruggedness, long life. Weighs only 30 pounds, twenty less than an old style brass magazine. Price only $95. Time payment plan, $30 down, balance $10 per month. Sold on approval basis.

MOLD DISKS REBUILT

Our patented process consists of mounting a steel band in place of the iron one. No welding, brazing, etc. Steel band withstands all the strains of use without cracking or breaking. The screw holes do not easily wear out. The central casting is trued up in the process and as it has by its prior use become seasoned, it is unlikely it will again ever warp. So in every way we believe the rebuilt disks are superior to new. Can arrange loans, exchanges, etc. Price for the rebuilding is only $30. Ask for one on examination and trial if desired.

MANY OTHER BARGAINS

Hundreds of fonts always in stock, built up to our standard layout and offered at fraction of their original price. Many new, used and rebuilt molds, pots, Monomelts, distributor boxes, spaceband boxes, assemblers, distributor bars, liners, spacebands, etc. We buy, sell and trade. Tell us what you have for disposal as well as what you need.

MONTGOMERY & BACON • **Towanda, Pennsylvania**

The New
FORM-O-SCORCH
Model "MMM"
featuring
Direct Heat
offers even heat and uniform shrinkage for the quick and efficient preparation of dry mats.
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able support, means actuated upon variation in tension of the running web to cause the force applying means to rock the lever member and move the support and thereby vary the pressure of the driven belt upon the web roll, and an adjustable means to vary the force applying means to alter the normal operating tension of the web.

2,086,068. ROLL CHANGING APPARATUS. Allan J. Cline, Chicago, and Harold L. McCleery, Downers Grove, Ill.; said McCleery assignor to said Cline. Application August 14, 1933. Serial No. 685,044. 21 Claims. (Cl. 242—58.)

1. A roll changing apparatus for multiple unit printing presses comprising a plurality of roll supports, one for each unit of the press, paster-making devices associated with each, the support for moving the same to bring the web of a full roll into contact with the web running from an expiring roll and for pasting the webs together, a plurality of operating folders each constructed to receive the webs from a group of press units, and means for selectively connecting the paster making device of any unit for operation in unison with the paster making devices of the units in any desired group.

2,086,144. WEB CHANGE DEVICE. Henry A. Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a corporation of Virginia. Application February 25, 1932. Serial No. 595,059. Renewed December 7, 1936. 4 Claims. (Cl. 242—58.)

4. In an apparatus, the combination of inclined tracks, a slide guided thereby, a saddle carried by the slide for supporting a web roll thereon and thereabove, means for raising the slide and saddle along the tracks to place the web roll in position for splicing, and means for lowering the web roll vertically after splicing into running position.

2,086,476. WEB CUTTING MECHANISM. Cecil George Quick, William Edward Bennison, and David Arthur Harling Alexander, London, England, assignors to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application July 16, 1935. Serial No. 31,634. In Great Britain July 17, 1934. 9 Claims. (Cl. 164—60.)

9. In a web cutting mechanism, a first rotatable shaft having axially adjustable abutments thereon, a second rotatable shaft having abutment cooperating, axially adjustable cutting disks thereon, an axially adjustable member having means to rotatably support one of said rotatable shafts, to simultaneously axially adjust all of the abutments and all of the disks relatively to each other, means to lock the axially adjustable shaft supporting member in any of its axially adjusted positions, and means to drive the rotatable shafts.

2,086,577. SHEET FEEDING MACHINE. Robert Reinartz, Offenbach-on-the-Main, Germany, assignor, by mesne assignments, to Arthur Wormser, Offenbach-on-the-Main, Germany. Application March 26, 1932. Serial No. 601,380. In Germany March 31, 1931. 52 Claims. (Cl. 271—27.)

1. In a sheet feeding machine, a plurality of suction devices adapted to seize the upper surface of a sheet adjacent its forward corners only, another suction device adapted to receive the sheet from the first named suction devices and to seize the lower surface of the sheet adjacent the forward edge, and means for operating the first named suction devices to transfer the sheet from its original position to a position adjacent the second named suction device, the sheet being at all times during its feeding under the control of at least one suction device.

2,087,437. PRESS FEEDING DEVICE. Herbert D. Knight, San Diego, Calif., assignor to Thomas J. McKee, Jr., Pasadena, Calif. Application April 7, 1936. Serial No. 73,105. 5 Claims. (Cl. 271—26.)

1. In combination, a frame, paper delivering means adapted to deliver onto the frame, at predetermined intervals of time, individual sheets of paper from a stack thereof, and paper straightening means on the table adapted to straighten and align the delivered individual sheets, the means comprising a plurality of arms, a shaft carrying the arms and extending across the frame, guides on the frame adapted to support and guide the shaft, and means in cooperative engagement with the shaft and adapted to move the shaft, thereby bringing the arms attached to the shaft against an edge of the sheet of paper to align the latter.

2,089,635. WEB SPLICING DEVICE. Henry A. Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a corporation of Virginia. Application October 27, 1933. Serial No. 695,427. Renewed January 13, 1937. 18 Claims. (Cl. 242—58.)

5. In a fresh roll rotating device for a web splicing mechanism, the combination with means for rotatably supporting a fresh roll, of means for pressing a running web with an oscillating motion against the surface of the fresh roll to rotate the roll.

2,090,296. WEB JOINING MECHANISM. Otto Hinkel, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application July 30, 1935. Serial No. 33,814. 22 Claims. (Cl. 242—58.)

1. In a web supply mechanism, cooperating web deflecting and web severing means, the means being swingable about a common pivot point in one direction to a folded position and a portion of one of the means being swingable in the other direction into folded position against the other means.

1. In a web supply mechanism, cooperating web deflecting and web severing means, the means being swingable about a common pivot point in one direction to a folded position and a portion of one of the means being swingable in the other direction into folded position against the other means.

Miscellaneous:

2,084,518. PERFORATOR FOR PRINTING PRESSES. Albert E. Unruh, Seattle, Wash., assignor of one-half to Alexander MacDonald, Seattle, Wash. Application May 18, 1935. Serial No. 22,141. 4 Claims. (Cl. 101—408.)

1. A gripper for a platen printing press comprising spaced parallel strips, and means for interconnecting the strips at intervals in fixed spaced relation along a common edge.

4. In combination with the centrally apertured and slotted rocking gripper bar of a platen printing press, of a gripper, and means on the gripper co-operating with the central aperture and slots of the bar for effecting attachment of the gripper to the latter at any selected point thereon.

2,084,573. PERFORATOR FOR PRINTING PRESSES. Park W. Cowan, Hollywood, Calif. Application May 13, 1936. Serial No. 79,516. 11 Claims. (Cl. 164—100.)

1. A perforator for printing presses having a holder body with means for attaching same to a cross bar, the body having a bore therethrough and a notch transverse to the bore, a shank slidably mounted in the bore and having a threaded section with a nut in the notch threaded thereon, and a lock nut on the end of the shank, the opposite end of the shank being split and having a rotary perforating disc journaled therein, and means to prevent rotation of the shank in the bore.

2,085,959. APPARATUS FOR CASTING PRINTERS ROLLERS. Daniel H. Donegan, Chicago, Ill. Application July 15, 1935. Serial No. 31,309. 7 Claims. (Cl. 18—26.)

1. In an apparatus, including a mold and a base plate arranged under and spaced from the lower end of the mold, means adapted to self center and hold a shaft in axial alignment with the mold, comprising, spiders, arranged one on each end of the shaft formed to fit slidingly in the mold, an axial boss on each spider, each boss having an axial opening, and an adjustable bushing in each of the openings to receive and center the shaft, the bushing in the boss mounted on the lower end of the shaft being adapted to rest on the plate.

2,087,190. PRINTING INK. Albert E. Gessler, Ardsley-on-Hudson, N. Y., assignor, by mesne assignments, to The International Printing Ink Corporation, New York, N. Y., a corporation of Ohio. No Drawing. Application July 14, 1932. Serial No. 622,453. Renewed April 11, 1936. 15 Claims. (Cl. 134—36.)

1. A printing ink which is substantially non-drying at ordinary temperatures and dries instantly on heating of the printed matter, consisting of coloring matter dispersed in an

organic viscous vehicle consisting o fa liquid component and a solid component dissolved in the liquid component in sufficient quantity to give the ink the consistency of an ordinary oil-varnish printing ink—the solid component being a member of the group consisting of natural and synthetic resins and cellulose compounds, and the major part of the liquid component being a chemical compound containing carbon, hydrogen and oxygen which dissolves and forms a stable solution with the solid component and which has a vapor pressure which, at 20° C., is as low as the vapor pressure of diethylene glycol monobutyl ether at 20° C., and, at 150° C., approximates that of ethyl alcohol at ordinary temperatures.

2,087,774. APPARATUS FOR CONVEYING AND BUNDLING NEWSPAPERS AND THE LIKE. Loye T. Lovette, Dayton, Ohio. Application June 4, 1935. Serial No. 24, 892. 12 Claims. (Cl. 100—31.)

12. A bundling device for a paper bundling apparatus, comprising a binder yoke, reciprocable over a stack of papers, a carrier mounted in one depending leg thereof, a feeding shuttle and a retrieving shuttle independently movable from the carrier across the space between the legs of the yoke, and a device carried by the other depending leg of the yoke to receive and grip one end of a binding wire carried to it by the feed shuttle, and to release the wire to the retrieving shuttle.

2,088,306. BASE FOR PRINTING PLATES. Lester A. Neumann, Chicago, Ill., assignor to M & L Typesetting & Electrotyping Company, Chicago, Ill., a corporation of Illinois. Application October 6, 1934. Serial No. 747,158. 1 Claim. (Cl. 101—385.)

A base for printing plates having a substantial portion of its area made up of a plurality of similar square quads normally arranged in rectilinear alignment with each other and each having a single coaxially disposed hole extending lengthwise therethrough and provided with an offset shoulder adapted for detachably securing a plate-hook therein, the quads being interchangeably adjustable with respect to each other, and a plurality of fractional quads arranged so that any one of the quads may be located out of normal alignment with adjacent quads so as to locate its respective hook-hole at any desired position on the base, and means for clamping the quads together.

2,088,398. PRINTING PROCESS. Homer L. Bishop, Dayton, Ohio, assignor of one-half to Earl E. Stansell, West Carrollton, Ohio. Application November 26, 1934. Serial No. 754,818. 12 Claims. (Cl. 41—25.5.)

1. The process of preparing makeready, including the steps of printing upon united laminated sheet material from a plate, cutting and removing portions of laminations while united underlying certain predetermined areas of the print, inserting the laminated material having portion thereof removed intermediate the plate and the packing cylinder with the removed portions in registry with corresponding portions of the plate to effect relative depression and elevation of different portions of the face of the plate.

2,088,470. PRINTING ROLLER. Abraham L. Freedlander, Dayton, Ohio, assignor to The Dayton Rubber Manufacturing Company, Dayton, Ohio, a corporation of Ohio. Application May 12, 1934. Serial No. 725,399. 3 Claims. (Cl. 91—67.8.)

1. A new article of manufacture for use as a printing roller comprising an axle of metal, a coating thereon to which rubber adheres, a soft rubber roller body vulcanized to the coating, a relatively thin coating of non-rubber material adapted to protect the rubber within while at the same time presenting a hard impervious surface that is not affected by printing inks, and a cement coating of benzol and divinyl acetylene.

2,088,471. PRINTING ROLL. Abraham L. Freedlander, Dayton, Ohio, assignor to The Dayton Rubber Manufacturing Company, Dayton, Ohio, a corporation of Ohio. Original application March 9, 1934. Serial No. 714,838. Divided and this application October 14, 1935. Serial No. 44,826. 6 Claims. (Cl. 91—67.8.)

1. A composite roller comprising a pervious resilient rubber body having an integrally attached synthetic rubber covering, said covering being sufficiently resilient to permit flexing of the rubber body and so thin as to be relatively incompressible, smooth and impervious in contrast to the resilient pervious body.

2,088,472. TREATMENT OF A ROLLER SURFACE. Abraham L. Freedlander, Dayton, Ohio, assignor to The Dayton Rubber Manufacturing Company, Dayton, Ohio, a corporation of Ohio. Application September 30, 1936. Serial No. 103,416. 10 Claims. (Cl. 91—67.8.)

2. A new article of manufacture comprising a roller having a resilient body, and a resilient inert oil resisting cover of synthetic rubber having non-tacky qualities, the oil resisting cover having its surface treated with oil.

2,088,512. APPARATUS FOR CLEANING PRESS CYLINDERS. William Gegenheimer, Brooklyn, N. Y. Application August 26, 1936. Serial No. 98,088. 5 Claims. (Cl. 101—425.)

5 A cleaner for press cylinders, comprising a bracket arranged adjacent to each end of the cylinder, a trunnion rotatably carried by each bracket, means for securing the trunnions against rotation, a supporting block on each trunnion, a screw in each block disposed in the direction of the cylinder, a blade bar having its ends engaged in the blocks, a yoke on each of the ends enbracing the adjacent screw, and spaced shoulders on the screw engaging opposite sides of the yokes.

2,089,225. PROCESS OF PRINTING AND SCORING AND PRODUCT. Victor H. Polachek, Chicago, Ill., assignor to Hearst Enterprises, Inc., Chicago, Ill., a corporation of New York. Application March 11, 1933. Serial No. 660,431. 14 Claims. (Cl. 101—226.)

1. In the manufacture of a sectionalized sheeted material, the steps which include applying a design to a flexible sheeted material, then scoring the sheeted material to form severable flexible connected sections of predetermined contour, and leaving a margin of the flexible sheeted material free of scoring to form a support for the flexible sections.

2,089,401. PRINTING PRESS ROLLER. Frank C. Murphy, Baltimore, Md. Application January 22, 1935. Serial No. 2,953. 2 Claims. (Cl. 287—52.01.)

1. A printing press roller comprising a cylindrical sleeve with a bore extending centrally therethrough, a shaft extending through the bore of the sleeve, end surfaces on the sleeve, a plurality of threads on the lateral surface of the bore adjacent each end thereof, a split wedge collar between the shaft and sleeve having threads at a portion adapted to cooperate with the first-mentioned threads to effect a tight coupling between the sleeve and shaft with the end face of the collar terminating within the confines of the end surface of the sleeve, and wrench engaging means provided on the end surface of the collar whereby a coupling thereof may be effected while permitting flush engagements of adjacent sleeve portions.

2,089,949. PROCESS OF COLORING PAPER. Pierre Drewsen, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio, a corporation of Ohio. Application May 6, 1935. Serial No. 20,102. 7 Claims. (Cl. 101—153.)

1. A process of coloring paper comprising the feegling of a paper strip between a knurled roller and a roller having a resilient surface flooding the surface of the knurled roller and the paper surface adjacent thereto with coloring material whereby in the movement of the paper between the rollers surplus coloring material is squeezed out and the color in the indentations of the roller is deposited on the surface of the paper and after separating from the paper removing all coloring material from the portions of the resilient roller which are adjacent to the edges of the paper subsequently contacting with the roller.

Platemaking:

2,084,353. PROCESS OF PRINTING MULTICOLORED PICTURES. James G. McNett, St. Louis, Mo. Application November 18, 1935. Serial No. 50,444. 2 Claims. (Cl. 95—5.1.)

1. A process of printing multi-colored pictures which consists in producing a series of impressions from a master printing plate with transparent ink on suitable strips of trans-

(*Continued on Page 62*)

★ **HOW TO GET "MORE MILEAGE" FROM PRESS BLANKETS**

The way to get more mileage from Press Blankets at lower mileage cost—(by mileage we mean impressions)—is to use Fitz Livecork Press Blankets. These blankets have gained a national reputation for their unusual resiliency and their ability to produce many millions of good impressions without make-ready or without taking a permanent set. You will be agreeably surprised at both the excellent work and the unusually low first cost of these blankets.

★ ★ Write today and let us figure on your requirements and send you a sample.

Fitzpatrick Felt Mfg. Co.
1791 E. 79th St.
Cleveland, Ohio

A CHANGE MAY HELP YOU

It isn't easy to change an established routine or buying habit. But the man who makes progress in newspaper production is, among other characteristics, a man who does not hesitate to make changes which may improve his newspaper.

Many mechanical superintendents and stereotype foremen have sent for samples of FLEX dry mats, not because of dissatisfaction with the mats they were using, but to find out whether a different mat might give them even better results.

That's why FLEX dry mats are being adopted by more and more newspapers. Why don't YOU send for samples? There's no charge, of course, and no obligation. Please specify gauge, shrink, and number of casts, and address Flexideal Dry Mat Company, 21 West Street, New York.

FLEX DRY MATS

Champion Blacks

WIN ON MODERN HIGH SPEED PRESSES

- CHAMPION HALFTONE — A non-scratch dense black which will not offset. Can be backed up in two hours.
- CHAMPION SUPER — Fully toned, free flowing, this black will work clean and sharp on super papers.
- CHAMPION BOOK—A high grade ink with good density, it will not shadow through on standard grades.

●

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Boston	Dayton	Jacksonville	Kansas City
Baltimore	Cleveland	Miami	San Francisco
Chicago	Los Angeles	New Orleans	Seattle

WHY YOUR PLANT NEEDS THIS

CUSHMAN PRECISION ROUTER

1. Contains every convenience and adjustment found in any other router.
2. Has no vibration due to series of belts or pulleys.
3. Reduces amount of current to about one-eighth of that used on radial arm routers.
4. Entire power plant is contained within the motor and mounted directly upon the arm of the router.
5. Head only can be furnished.

Write for Prices and Complete Information

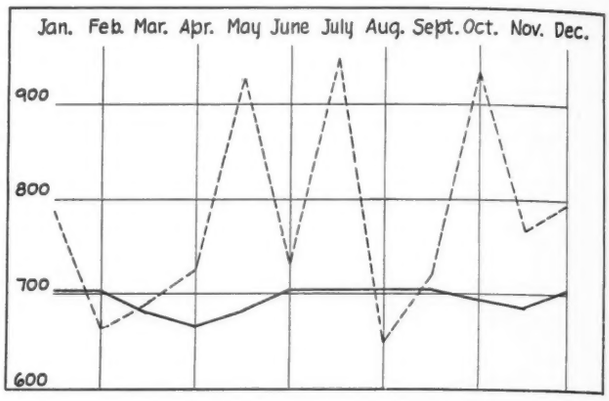
CUSHMAN ELECTRIC COMPANY
CONCORD, NEW HAMPSHIRE

Budgetary Control

(*Continued from Page 4*)

"Executive Control of Labor" and estimating a 5% sales increase in 1937 the labor budget should be as shown in Chart 3. Advantage should be taken of the volume variance trend below the average cost but should not be allowed to attain the high peaks above the cost estimated as a just and fair cost under the system of "Executive Control of Labor" which bases this cost upon the page contents in relation to competency rating

Chart 3
GRAPHIC REPRESENTATION OF LABOR AND PRODUCTION BUDGET, 1937



and wages. The straightening of this labor curve as shown on Chart 3 will result in the saving of many dollars.

Determining Efficiency of Superintendent

The seventh column headed "1938 Budget" carries the sum of "1938 Budget per Page" times "Estimated No. Pages" and is the expected payroll for each month of 1938. The efficiency of the superintendent will be governed during the year by the relation of his actual page cost to the "1938 Budget per Page". The publisher will be prepared to meet the payroll total each month as shown in "1938 Budget" and the advertising department will be expected to sell advertising enough to justify the "Estimated No. of Pages."

By using the system outlined in "Executive Cost Control" (February-March issues *Printing* Equipment *Engineer*) the superintendent should have little difficulty in staying within his labor budget.

Where there have been material increases in wage scales in the composing room during the past five years it may be advisable to reconcile each month's payroll to the new scale. This is done by adding the percentage of increase each month before calculating the five year average. For instance, we will say that in 1936 a 10% increase was granted. Then the payroll figures for each month prior to the increase would be raised 10%. Otherwise your 1938 budget would be based on the old wage scale which would make it unequitable and therefore of little value.

The 1939 budget will be based upon the experience shown in relation of actual expenditures as compared to the budget in 1938 and so on.

Manipulating the Budget

The percentage budget quoted in the first part of this article, and other associational statistics and information now become of value in making comparison of your expense budget with those of other publishers. From the information compiled in forming this budget and the budget itself make comparisons with this associational data. You may find that some of your expenses are excessively high and reductions should be made in the budget.

There must be an expense account in the books for each item of the budget. It is advisable to notify the responsible executive at any time during the month the budget is exceeded, or exhausted. Example:

NOTICE

To—Mr. Smith
Dept.—Composing Room
Account—Matrices

Amount expended	$22.10
Budget for—July	$20.00
Amount Over Budget	$ 2.10

Use of Monthly Form

In order to enjoy the best results from budgetary control of expenses certain reports must be made monthly. Here is a suggested form:

DEPARTMENTAL BUDGET REPORT
For JANUARY, 1938.
Department—COMPOSING ROOM

Number of Pages Estimated.....
Number of Pages Produced.....
Over or Under Budget.....

DIRECT LABOR:
Budget.....pages @ $.....per page.....$.....
Actual.....pages @ $.....per page.....$.....
Over or Under Budget.....$.....

VARIABLE OVERHEAD	Budget	Actual	Over or Under
Power	$	$	$
Heat	$	$	$
Light	$	$	$
Water	$	$	$
Supplies	$	$	$
Repair Parts	$	$	$
Matrices	$	$	$
Compensation Insurance	$	$	$
Social Security Taxes, etc.	$	$	$
Total	$	$	$

NON-VARIABLE OVERHEAD:
Budget for Month.....$.....
Actual.....$.....
Over or Under.....$.....

GENERAL:
Total Budget for Month.....$.....
Actual Expenses.....$.....
Over or Under.....$.....

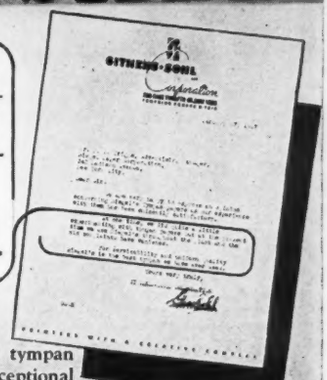
A copy of the foregoing report goes to the department head and to the business manager for their guidance. It is unnecessary to detail Non-Variable Overhead to the superintendent as he does not control this group of accounts and it will seldom or never vary unless additions or deductions in equipment, or charges, are made and in such event the budget should be changed.

Always bear in mind when forming a budget that it must not be impossible of attainment. Insist that it be met in every item, or that proof be submitted that the particular item was in error and impossible of attainment. Reward those responsible for holding expenses below budget levels as an incentive to further vigilance.

COMPLAINTS VANISHED

At one time, we did quite a little experimenting with tympan papers but at the present time we use Riegel's throughout the plant and the old complaints have vanished.

For serviceability and uniform quality Riegel's is the best tympan we have ever used.



CERTIFINE — A low-priced tympan with a hard, even surface and exceptional strength. Ideal for short-run job work. Nationally stocked in roll widths for every press.

TREATED JUTE—The old reliable. Its tough jute fibres stand up under the longest runs. Stocked in roll widths for every press.

DRUMHEAD — Save time, temper and money with this ready-cut and scored topsheet of the finest treated jute. Sold by leading paper merchants in sheet sizes for high-speed presses only.

CLIP THIS AD
For Free Trial Sheets. State Size and Press.

RIEGEL TYMPANS
RIEGEL PAPER CORP., 342 MADISON AVE., NEW YORK, N. Y.

It out-performs any Saw Trimmer on the market

Cleveland Plain Dealer

recently installed **5**

C&G No. 3-A Deluxe Model Saw Trimmers

* * *

Nashville Banner

2

of the same model

* * *

Milwaukee Journal

has **7**

C&G Saw Trimmers

C&G No. 3-A Deluxe Model

Descriptive Literature Upon Request

Milwaukee Saw Trimmer Corporation
612 East Clybourn Street Milwaukee, Wisconsin

SUPERIOR

Ungummed or gummed
Packing felt offers
Every efficient quality
Required by stereotypers
In metropolitan news
Offices for the
Right preparation of mats

cut strips
sheets
rolls

write for samples and prices

AMERICAN PUBLISHERS SUPPLY
Box 131 West Lynn, Mass.

CHALLENGE HI-SPEED QUOINS

Save 70-80% on lock-up time. Two of them replace 5 to 8 ordinary quoins. Each Hi-Speed Quoin is self-contained, self-locking—can't slip—positively accurate. Made of steel, cadmium plated, in six sizes: 4½, 6, 7½, 9, 10½, and 12 inches. Write for data and prices.

The CHALLENGE MACHINERY Co.
CHICAGO GRAND HAVEN, MICH. NEW YORK
273

Typographical Gymnastics

By LEROY CHURCH*

ABOUT three years ago an advertising manager asked the writer whether or not it would be possible or practical to place a black line or a cancellation across the face of a comparative price without going to the expense of making a zinc etching. The answer was "No." In most composing rooms, particularly those where the time element stands out pre-eminently, the answer to all questions pertaining to advertising pyrotechnics or typographical didos usually is "No." But in this particular instance concerning the cancellation we began to wonder, was the answer "No"? After some experimentation a method for full cancellation was developed that is both practical and possible.

In the beginning we attempted to find some method of making the cancellation in a solid black line that would give the same appearance as though it had been

Was $~~12~~ Now $5

done with a brush or pen, and were partially successful. Three-cornered brass tabular rule forced down into Ludlow letter characters printed a nice solid line, but there was no way to hold it in place.

We switched to various sizes of wire. The thinner the wire, the easier it was to force it down into the comparatively soft type face, but when we got to using a thickness that made a suitable black line the face of the figures (or letters as the case may be), were badly broken down and the cancellation was worthless. Finally it was found entirely practical to use bank pins for this purpose.

In putting the cancellation line through a Ludlow, Linotype or Intertype price or word, only one tool is absolutely essential, and that is a hack saw blade.

Place the slug you wish to mark with a cancellation

We Draw The LINE On QUALITY

in a vise, face up. Lay a slug on top of the line of type at the same angle as the intended slanting cancellation. Hold the slug firmly with one hand down on the face of the line, and with the hack saw blade cut a shallow line or groove across the face of the type, using the slug as a guide, being very careful not to scratch the balance of the type face. You will probably have to experiment with several slugs before accuracy in depth of the slot may be attained.

You now have a slot across the face of the type. To make the black line with a slight showing of white on both sides insert a No. 2 bank pin (not the ordinary dressmaker's pin) in the slot. These No. 2 bank pins are usually sold at office supply houses. The pin used in the sample shown with this article is a No. 2 Monarch bank pin. After many experiments these pins were found to be the most satisfactory because they are a

*Typographer, Akron (O.) *Beacon-Journal*

trifle wider than the slot made by the hack saw blade, making it necessary to force the wire pin down into the slot.

The slot should be about three points since that is the thickness of the pin. The set of the saw is just a trifle under three points. Cut a piece of the pin the length of the cancellation desired and force it down into the slot by covering the wire with a small piece of wood or a slug, tapping gently on top until the wire is down even all the way across.

It is almost unbelievable, but true, nevertheless, that you cannot pull this wire out with a straight pull, it is necessary to pull UP to release the wire.

With a pair of snips and a vise at hand a cancellation line as shown can be put in a slug in less than five minutes and the writer believes most any printer with the inclination and a little mechanical ability could do the same.

INTERNATIONAL GUILD MEETING

The annual meeting of the International Supply Salesmen's Guild was held August 11, at Hotel Cleveland, Clevaland, Ohio.

The following officers were elected: President, L. A. Neumann, M. & L. Typesetting and Electrotyping Corporation, Chicago, Illinois; First Vice President, Albert Monaco, E. W. Blatchford Company, New York; Second Vice President, Bert Dray, Zellerbach Paper Co., Los Angeles, California; Treasurer, J. Gus Liebenow, Thomson-National Press Company, Chicago, Illinois; Secretary, Basil Parsons, Thomson-National Press Company, Boston, Massachusetts.

The 1938 meeting will be held in Boston at the same time the International Association of Printing House Craftsmen holds its Annual Convention, it has been announced by President Newmann.

ELECTED VICE PRESIDENT

T. R. Jones, President of American Type Founders, Elizabeth, N. J., announces the election of Frederick B. Heitkamp as Vice President of American Type Founders Sales Corporation. Mr. Heitkamp was formerly General Sales Manager.

Under Mr. Heitkamp's direction American Type Founders has developed many innovations in sales policies, and the Company has introduced a number of new products and new type faces including Kaufman Script, Onyx and Stencil.

NEW BLACK

It has been announced that a new Spot Carbonizing Black for lithographers has been developed by the E. J. Kelly Company. Officials of the Kelly Company state it will remain sensitive for sixty days and suggest a novel manner by which to run the new black.

PRINTERS PLAN FOR S.F. FAIR

They say that all good printers eventually meet in San Francisco and by way of illustration they quote Marshall Maslin's recent newspaper story of the Brothers Rollins, who live within forty-five miles of each other but who, like most printers, are so busy they seldom see each other. Carl, in charge of printing for the Yale University Press lives in New Haven, while Malcolm is promotion manager for *Cosmopolitan Magazine* at Greenwich. When vacation time came Malcolm felt that he really ought to call on Carl but instead he dashed out to San Francisco. Of course he ran smack into Carl, who, as he didn't know, had come 3,000 miles to deliver a series of lectures on printing.

In any event, printers from all over America are making definite plans to meet in San Francisco during the $50,000,000 Golden Gate International Exposition of 1939. As in the last San Francisco Exposition in 1915 when the *Examiner's* new color press stole the show, again in 1939 the printing exhibit is expected to be one of the outstanding features. Inspired by the fact that printing and publishing is San Francisco's leading industry, several local firms, which have already acquired international reputations for fine printing, are planning a graphic arts display that will set new standards.

Contemplated to interest buyers of printing as well as those actively engaged in the industry, the exhibit in the Palace of Business Efficiency will tend not only to elevate standards in the industry but to arouse a wider appreciation of the power of printing as a tool of commerce. Working exhibits will demonstrate the newest machinery in all processes before an estimated attendance of twenty million.

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Patents

(*Continued from Page 57*)

lucent material, one for each primary color of the finished print, tinting each strip with an opaque light reflecting substance in shades corresponding to the desired shades of the color of the finished print, copying the tinted strips through a halftone screen, and simultaneously illuminating the strips from the rear to photographically stop out on the negatives the areas corresponding to the untinted portions of the strips, producing a color separation plate from each of the halftone negatives, and printing the master printing plate and the color separation plates in superposition to produce the finished picture.

2,084,642. APPARATUS FOR COATING PRINTING CYLINDERS. Charles L. Henderson, Appleton, Wis., assignor to Paper Patents Company, Neenah, Wis., a corporation of Wisconsin. Application October 24, 1935. Serial No. 46,506. 14 Claims. (Cl. 91—42.)

1. In an apparatus for coating printing cylinders with a sensitized resist solution, the combination of a revoluble table mounted on a vertical axis, means for rotating the table, means for supporting a horizontal cylinder rotatably on the table, means for pouring the coating solution on the cylinder as the table rotates, and means for rotating the cylinder on its longitudinal axis during the pouring operation.

2,085,740. PRINTING PLATE MOLD AND METHOD OF MAKING SAME. Arthur B. Davis, Springfield, Ohio. Application July 20, 1934. Serial No. 736,222. 8 Claims. (Cl. 41—25.)

1. A printing plate mold comprising, in combination, two layers of ductile metal such as lead soldered to oppo ite sides of a reinforcing sheet of substantially stronger metal, the outer surface of one of the layers being indented by type cavities corresponding to the printing surface to be formed, the other layer having a continuous flat outer surface parallel to the roots of the type cavities.

2,085,908. PRINTING PLATE BEVELING MACHINE. William F. Huck, Richmond Hill, N. Y., assignor, by mesne assignments, to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application November 5, 1932. Serial No. 641,442. 29 Claims. (Cl. 29—21.)

27. In a machine trimming the four edges of a rectangular printing plate, the combination of a support for the plate to which the plate is immovably held, cutting means for first trimming two opposite edges of the plate, other cutting means for subsequently trimming the other opposite edges of the plate, and means effective to make each of the cutting means operative in the sequence indicated, whereby the plate will be fixed to the support while each of the cutting means are in operation.

2,088,399. PHOTOENGRAVING PROCESS. James Henry Gibson, Teaneck, N. J. Application September 22, 1936. Serial No. 101,921. 1 Claim. (Cl. 101—401.3.)

A photo-engraving process comprising sensitizing both surfaces of a metal printing plate producing a halftone negative on the obverse side of a transparency of substantial thickness, contacting one of the surfaces of the sensitized plate with the obverse side of the transparency so as to bring the negative into direct contact with one surface of the plate, exposing the contacted transparency and plate to the action of light, contacting the other side of the sensitized plate with the reverse side of the transparency, again subjecting the plate and transparency to the action of light, the substantial remoteness of the halftone negative from the second side of the plate causing such diffusion that the screen gradations in the intermediate tones and shadows merge into solids and the high light dots virtually disappear, then developing and etching the plate.

2,089,550. PRINTING PLATE BASE. Horace W. Hacker, La Grange, Ill. Application May 6, 1935. Serial No. 20,069. Renewed June 1, 1937. 5 Claims. (Cl. 101—382.)

1. Lumber from which printing plate bases are to be cut and the contacting surfaces of whose elements are cemented together, comprising metallic sheets, a plurality of wood blocks between the sheets, and a plurality of wood veneer sections secured to and overlying the outer face of each metallic sheet, the adjacent edges of the veneer sections being disposed in spaced relation.

Printing Presses:

2,084,418. PRESS INKING DEVICE. Charles T. Walter, Chicago, Ill., assignor to Industrial Patents Corporation, Chicago, Ill., a corporation of Delaware. Application June 5, 1936. Serial No. 83,645. 11 Claims. (Cl. 101—340.)

1. In combination with a printing press having an inking plate and transfer means for transferring ink from the inking plate to the type of the press, means including a drip vessel spaced from and above the inking plate for feeding miscible fluids to the inking plate for incorporation with ink during the printing operation.

2,084,783. PRINTING PRESS. Frederick W. Seybold, Westfield, N. J., assignor to American Type Founders Incorporated, Elizabeth, N. J., a corporation of New Jersey. Application April 3, 1936. Serial No. 72,622. 20 Claims. (Cl. 101—232.)

17. In a printing press or the like, in combination, a pair of spaced side frames, a feed board, a printing couple including an impression cylinder provided upon its periphery with sheet grippers, an impression cylinder shaft mounted for rotation in suitable bearings carried by the side frames, a drive shaft also rotatably carried by the side frames, a gear carried by the drive shaft upon one side of the press, a gear carried by the impression cylinder shaft and meshing with the drive shaft gear, a sun gear of a planetary gearing assembly rigidly carried by the opposite end of the drive shaft, a ring gear and a planet carrier each rotatably mounted upon the drive shaft, a grooved cam member rigidly carried by one end of the impression cylinder shaft, a lever arm carried by the planet carrier and adapted to be guided by the cam groove to oscillate the planet carrier, a set of auxiliary grippers revolubly mounted upon the side frames for movement in an orbit which contains and is eccentric to the impression cylinder, gearing connecting the set of auxiliary grippers with the ring gear, the shape of the cam groove being such that through the oscillation of the planet carrier the set of auxiliary grippers is caused to move through its orbit at a variable speed for the more effective transfer of the sheet from the feed board to the cylinder grippers.

2,085,126. CONTINUOUS PRINTING MACHINE. Frederick Shurley and Queenie Halford Shurley, Salt Lake City, Utah. Application June 15, 1936. Serial No. 85,280. 12 Claims. (Cl. 101—40.)

1. A continuous printing machine for articles having an impenetrable surface, comprisprising a pair of spaced disks, means intermittently rotating the disks, gripping means on the disks adapted and arranged to hold the articles, gear means on the gripping means, a printing frame adjacent the top of the disks, said disks carrying the articles into engagement with the printing frame whereby an imprint is made on the articles, a rack on the printing frame engageable with the gear means whereby the gripping means is rotated, the gripping means releasing the articles after the articles have been printed.

2,085,185. PRINTING PRESS. Curtis S. Crafts, Oak Park, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois. Application September 15, 1933. Serial No. 689,512. 30 Claims. (Cl. 270—5.)

1. In a rotary newspaper printing unit the combination of a pair of printing couples, a driving gear meshing with a removable gear on one cylinder of each couple and a gear on

each cylinder at the other end of the cylinders, the gears of each couple meshing with each other, a removable idler meshing with a gear of each couple on the other side, whereby either of the removable gears may be moved out of mesh with the driving gear to drive the couple in either direction through the idler, inking drums for each couple driven by the plate cylinder of its couple, and a fountain roller for each couple, and means for driving the inking mechanism always in the same direction.

2,085,833. PRINTING PRESS MECHANISM. Burt D. Stevens, Evanston, Edward F. Dudley, Oak Park, Ill., and Ernest A. Verrinder, Redlands, Calif., assignors to The Miehle Printing Press and Manufacturing Company, Chicago, Ill., a corporation of Illinois. Application December 1, 1933. Serial No. 700,416. 20 Claims. (Cl. 101—189.)

1. In a multicolor printing press, the combination of a plurality of printing units arranged in tandem, each of the units having a printing couple comprising an impression cylinder and a cooperating type bed, an endless chain gripper conveyor on one printing unit, a forwarding table associated with the conveyor to receive printed sheets in timed sequence therefrom, and means on the table for controlling sheets and registering them before they are fed into an adjacent unit.

2,085,845. PRINTING APPARATUS. Uriah M. Binkley, Evanston, Ill., assignor, by mesne assignments, to The Carborundum Company, Niagara Falls, N. Y., a corporation of Delaware. Application September 19, 1934. Serial No. 744,707. 3 Claims. (Cl. 101—420.)

3. In a printing apparatus, the combination consisting of a tympan roll, a makeready superimposed upon and encircling the tympan roll, a granular coated ink-absorbent sheet encasing the tympan roll and makeready, and a layer of metal foil interposed between the makeready and granular coated sheet, and united to the back of the granular coated sheet.

2,086,075. DOCTOR FOR USE IN PRINTING MACHINES. Isaac Harold Gilbertson, Manchester, England, assignor to The Calico Printers' Association Limited, Manchester, England, a British company. Application July 3, 1936. Serial No. 88,852. In Great Britain July 11, 1935. 8 Claims. (Cl. 101—169.)

1. A shear for a doctor for a printing machine comprising an angle section, bolt holes extending through one flange of the angle section shear and so positioned therein that the bolt holes in the centre portion of the shear are less distant from the edge of the shear over which the doctor is to extend than the bolt holes in the end portions of the shear.

2,086,227. PRINTING MACHINE. William F. Huck, Richmond Hill, N. Y., assignor, by mesne assignments, to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application June 7, 1935. Serial No. 25,388. 2 Claims. (Cl. 101—425.)

2. In a sheet-fed printing machine having a frame, a pair of cylinders mounted on the frame, and gripper means mounted on one of the cylinders and adapted to engage a sheet; a brush arranged adjacent the last mentioned cylinder and adapted to engage the trailing end of a sheet while being conveyed by the grippers, a cam rotatably mounted on the frame, means including a cam roller having an operative connection to the cam and adapted to actuate the brush when the leading edge of the sheet is passing under the gripper means, a cylinder tripping mechanism connected to one of the cylinders, and other means operatively connecting the cylinder tripping mechanism and the means having the cam roller

2,086,231. PLATE CLAMP FOR PRINTING MACHINES. Arvid Lundquist, New York, N. Y., assignor, by mesne assignments, to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application December 1, 1933. Serial No. 700,575. 24. Claims. (Cl. 101—378.)

1. The combination with a plate holding cylinder having longitudinally movable plate clamps, of an internal screw, a clamp actuating member in operative engagement with the screw, and a manually actuated drive to rotate the screw.

RE-ISSUE—20,458. INKING APPARATUS AND METHOD OF OPERATING THE SAME. Alfred Schlesinger, Aldwych, London, England. Original No. 1,980,639, dated November 13, 1934. Serial No. 597,362. March 7, 1932. Application for reissue November 5, 1936. Serial No. 109,319. In Germany July 16, 1929. 15 Claims. (Cl. 101—350)

13. The method of conditioning printing ink in its transmission from the ink supply to the inking rollers of a printing machine, which ink is unsuitable for printing if subjected to a rubbing action incident only to distribution during transfer, which method consists in isolating for a given period a definite charge of ink to be used for printing, then during such period of isolation subjecting the charge of ink to an auxiliary rubbing action of such intensity as to develop enough frictional heat to bring the whole charge of ink to a uniform condition of fluidity suitable for printing, and thereafter transferring the charge of frictionally heated ink for transmission to the inking rollers of the machine.

2,087,017. MACHINE FOR PROVING PRINTING CYLINDERS. Murray N. Bulford, Clearwater, S. C., assignor to The Textile-Finishing Machinery Company, a corporation of Rhode Island. Application April 2, 1936. Serial No. 72,308. 16 Claims. (Cl. 101—157.)

1. In a machine for proving printing cylinders, pairs of rolls for engaging the outer surface of the cylinder and rotatably supporting the same, and means for moving the pairs of rolls and cylinder supported thereby to cause the cylinder to engage with the work.

2,088,377. PRINTING PRESS. Abel Kluge and Eneval Kluge, St. Paul, Minn., assignors to Brandtjen and Kluge, Inc., St Paul, Minn., a corporation of Minnesota. Application December 30, 1932. Serial No. 649,569. 33 Claims. (Cl. 101—287.)

8. A gripper mechanism for printing units having a bed and a rocking platen and sheet feeding and delivery members movable over the open platen, the former to and from sheet depositing position and the latter to and from sheet taking position, the gripper mechanism including a gripper supporting bar hinged on the platen, platen grippers mounted on the bar, a rotational cam, an arm on the bar, a rocking cam cooperating with the first cam and with the arm, tension means acting on the arm to hold it against the rocking cam and, in turn, to hold the rocking cam against the rotational cam, the tension means operating to open the grippers from the open platen substantially at the time of the taking of the printed sheet by the delivery member, the cams cooperating to close the grippers against the platen, the rocking cam having an arcuate cam surface disposed concentrically with respect to the pivotal axis of the platen during the opening swing to hold the grippers closed against the opening platen, the cams further cooperating to restrain the action of the tension means in opening the grippers and at the same time effect the opening of the grippers in advance of the sheet feeding member in its movement over the platen to sheet depositing position.

2,088,681. WEB REVERSING UNIT. Adolph M. Zuckerman, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application February 14, 1936. Serial No. 63,922. 12 Claims. (Cl. 101—180.).

1. In a web printing machine, a plurality of printing couples, a web-reversing unit movable to and securable in any one of a plurality of operative positions relative to the printing couples for reversing the web between the impressions of selected printing couples, and means for guiding the web to and through the printing couples and web-reversing unit.

2,088,897. PRINTING PRESS. Curtis S. Crafts, Oak Park, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois. Application March 25, 1935. Serial No. 12, 956. 21 Claims. (Cl. 270—86.)

1. In a printing press folder, in combination, driven devices operating on the paper, a preassembled driving unit comprising a shaft, a gear fixed thereon, a thrust bearing, a radial bearing and a slidable radial bearing housing mounted on the shaft, the unit being movable transversely into position within the machine frame, and means for fastening the bearing housings to the press frame to aline and hold the unit in position to drive the devices.

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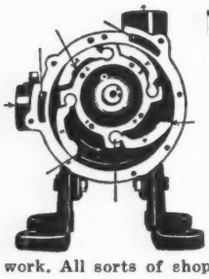

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MOVE BOSTON OFFICE

The Triangle Ink and Color Co., Inc., with main office and factory at 26-30 Front St., Brooklyn, has announced removal of its Boston office to 161-163 High St., Boston. William F. Sullivan will remain in charge of the office and the Boston office personnel will be the same.

S.U. EXPANDS

The Sigmund Ullman Company, Division General Printing Ink Corporation has extended its sales representation and service facilities by opening branch offices in the following cities:

Nashville, 130 Fourth Ave., North, Phone Nashville 5-2204, J. F. Dunn, Mgr.

Milwaukee, 315 East Detroit St., Phone Daly 6764, John Landgraf, Mgr.

Los Angeles, 530 Stanford Ave., Phone Michigan 2671, Guy Sensiba, Mgr.

St. Paul, 2482 University Ave., Phone Nestor 2873, William C. Lawrence, Mgr.

UNIQUE PACKAGE

An unusual container has recently been placed on the market for Captain Applejack, apple brandy, by Hickory Town Distilling Company, of Hanover, Pa. The package appears at first glance to be a handsome "hammered silver" flask. Closer inspection reveals a pint bottle with an all-over covering of paper-backed silver-like foil, embossed in a "hammered-silver" design. These covers are printed in red and black on Reynolds Metal, by Reynolds Metals Company, New York. Antique type lettering carries out the impression of quality and age. The pint flasks are manufactured to order by Carr Lowery Glass Company, the closures by Armstrong Cork Company.

OK FOUNDRY CONTEST WINNERS

The OK Light Type Foundry, Chicago, recently conducted a contest related to its product. Announcement was made in the September issue of *OK Ahead*, the first issue of the firm's house organ.

First prize of $100 was won by Eino E. Wigren, The Graphic Press, Cleveland. The winning advertisement was reproduced on page 4 of the new house organ.

Second prize of $50 was awarded to Joseph Thuringer, Bohme & Blinkman, Cleveland.

The $25 third prize went to Richard Hoffman, The College Press, Los Angeles, Calif.

270 A MINUTE

Based on a preliminary estimate of current traffic, Railway Express Agency is now handling approximately 145,000,000 shipments annually, the *Express Messenger*, company publication, estimates, and that this represents an average of 270 shipments every minute of the day.

PHOTO-LITH CONVENTION

The fifth annual convention program for the National Association of Photo-Lithographers has been made up for the participation of employer and employees. The convention will be held at Hotel Hollenden, Cleveland on October 14, 15 and 16.

The convention will utilize lithograph shop facilities in the various work operations in a litho plant. During the technical discussions copy will be developed, stripped, opaqued and printed to a metal plate for both albumin and deep etch work. These plates will be placed on a press for examination at close range.

Technicians who are scheduled to conduct these demonstrations include a representative of the Eastman Kodak Company, K. W. Martin of Harold M. Pitman Company and Summerfield Eney of the Champion Paper and Fibre Company.

Major Wallace W. Kirby of the Kirby Lithograph Company, Washington, D. C., will preside over a full morning's discussion on problems of the Photo-Lithographer.

The Harris-Seybold-Potter Co. has invited the association to visit its factory and to see the new chemical and research laboratories which have been set up for the benefit of the lithographic industry.

A number of equipment and supply manufacturers have contracted for exhibit space at the convention. The list of exhibitors includes: Agfa Ansco Corp., Eastman Kodak Co., Hammer Dry Plate Co., Philip A. Hunt Co., Merck & Company, Thormod Monsen & Son, Harold M. Pitman & Co., Sinclair & Valentine, Wesel Mfg. Co.

Technical Literature

For September, 1937

1—*Norma-Hoffmann Issues New Catalog*—Norma-Hoffmann Bearings Corporation, Stamford, Conn., has just issued a new catalog—No. F-958—describing its complete line of Precision Ball, Roller and Thrust Bearings. This is a book of 84 pages, with cover, 8½ in. by 11 in. size. It includes tabulated data on sizes, dimensions and load ratings of 108 distinct series of Precision Bearings, embracing over 3000 cataloged sizes, the most comprehensive line in America. Valuable engineering data are also presented, including cross-sectional drawings of typical applications of bearings of various types; full bearing tolerances; instructions for mounting, lubrication and protection; recommended dimensions of housings, shafts and shaft shoulders. In addition to the standard Norma-Hoffmann types listed, a number of the standard Precision Bearings and Ultra-Precision Bearings developed for special and unusual purposes are shown in cross-section. *P-Double-E File No. 5C.*

2—*Brass Magazines, Improved Magazines, New Spacebands*—Three circulars issued by Montgomery & Bacon present technical information about products as given in above titles. *P-Double-E File No. 1G8.*

3—*New Colored Folder, No. 508*—Showing the uses and types of Stackers, Tiering Machines and Portable Elevators for piling goods and products from floor to ceiling, to provide additional space has just been issued by the Lewis-Shepard Company. *P-Double-E File No. 4D and 5UU.*

4—*101 Reasons*—Four-page folder illustrates and describes several of the principal improvements in Intertypes of recent development. *P-Double-E File No. 1G.*

5—*Productimeters*—Circular illustrates 9 kinds of counters of various kinds made by Durant Manufacturing Company. *P-Double-E File No. 5HH.*

6—*D. C. Preset-Speed Printing-Press Controllers*—Folder illustrates and describes controllers for all kinds of presses, folders, embossers, stitchers, waxing machines and bag machines made by General Electric Company. *P-Double-E File No. 5CC.*

7—*Monotype-Directoplate All-Metal Precision Camera*—Illustrated folder gives technical description of all-metal precision camera.

8—*APS Superior Matrix Delivery Belts*—Folder and a swatch describes all of the different kinds of fabricated belts furnished by American Publishers Supply for Linotypes and Intertypes. *P-Double-E File No. 1G9.*

9—*Shafting and Shaft Applications*—Booklet issued by La Salle Steel Company, Chicago, gives detailed technical data on different shaft application and gives the kinds of steel most applicable to the different applications.

10—*Parts Catalog*—Illustrated catalog describes replacement parts and supplies for use on line-composing machines. Issued by Linotype Parts Company.

11—*Hawkins Radial Arm Flat Router*—Booklet issued by Platemakers Equipment Company describes technically and gives uses of the router for stereotypes, electrotypes and engravings.

12—*Eliminating Vibration Losses*—Illustrated bulletin describes purpose of vibration eliminating devices, gives purpose of each kind and their application by way of concrete examples as interpreted by Korfund engineers.

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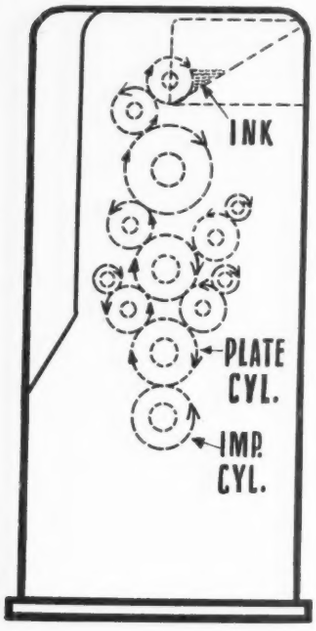
Wale Ink Distribution

Following publication of A. G. Fegert's technical story on the Wale Rotary Press in the August issue of *Printing* EQUIPMENT *Engineer*, interest was exhibited by our readers in the statement that "the ink distribution is so regulated that an even downward flow is insured for printing purposes and surplus ink is automatically forced back to the ink fountain." George W. Leech of the Standard Process Corporation submits the accompanying diagram to show the travel of the ink from the fountain



Side elevation showing component parts of Wale Rotary Press. The split arrows show the downward flow of ink from the fountain. The black arrow heads, according to the builder, indicate the means for forcing surplus ink back to the fountain.

to the form rollers and back again. The open-head arrows indicate the down travel of the ink and the black arrows show the return of any surplus ink that might have accumulated on the form rollers.

Mr. Leech states: "Two points that are important in understanding this distribution are, first, the inking system is completely rotary and all rollers are in contact with each other at all times. The second point is that if a roller has a surplus of ink on it, it will deposit some of that surplus on a roller that it comes in contact with, which has only a minimum amount of ink on it."

NOW STOCKS BEARINGS

As a means of satisfying the rapidly increasing demands for immediate bearing service, The Bantam Bearings Corporation is now stocking ball thrust bearings in sizes from ½ in. to 3¼ in. bore, and roller thrust bearings in sizes from 6 in. o.d. up to 12 in. o. d.

The complete list of sizes and types of these bearings is included in Engineering Bulletin No. 101 which is available to any of the readers of this publication without cost.

GRAPHIC ARTS LECTURES

The course of lectures for Department of Printing, Carnegie Institute of Technology, during 1937-1938, has been announced. The dates, titles, speakers, company connection and city are as follows:

October—Gravure Printing—by Alfred M. Geis, Alco-Gravure Company, Baltimore, Maryland.

November—Offset Printing—by H. A. Porter, Harris Seybold Potter Company, Cleveland, Ohio.

December—Type and Typography—by Sol Hess, Lanston Monotype Machine Company, Philadelphia, Pa.

January—The Making of a Modern Newspaper—by O. Alfred Dickman, The *Herald Tribune*, New York City.

February—Twenty-fifth Anniversary of the Founding of the Department of Printing—Special Program with Harry L. Gage, Mergenthaler Linotype Company, Brooklyn, New York, as speaker.

March—New Developments in Color and Printing Inks—by George Welp of the International Printing Ink Corporation.

April—New Developments in Paper for Printing—by Ken Hunt, Champion Paper and Fibre Company, Hamilton, Ohio.

May—Fine Book Making—by speaker to be selected.

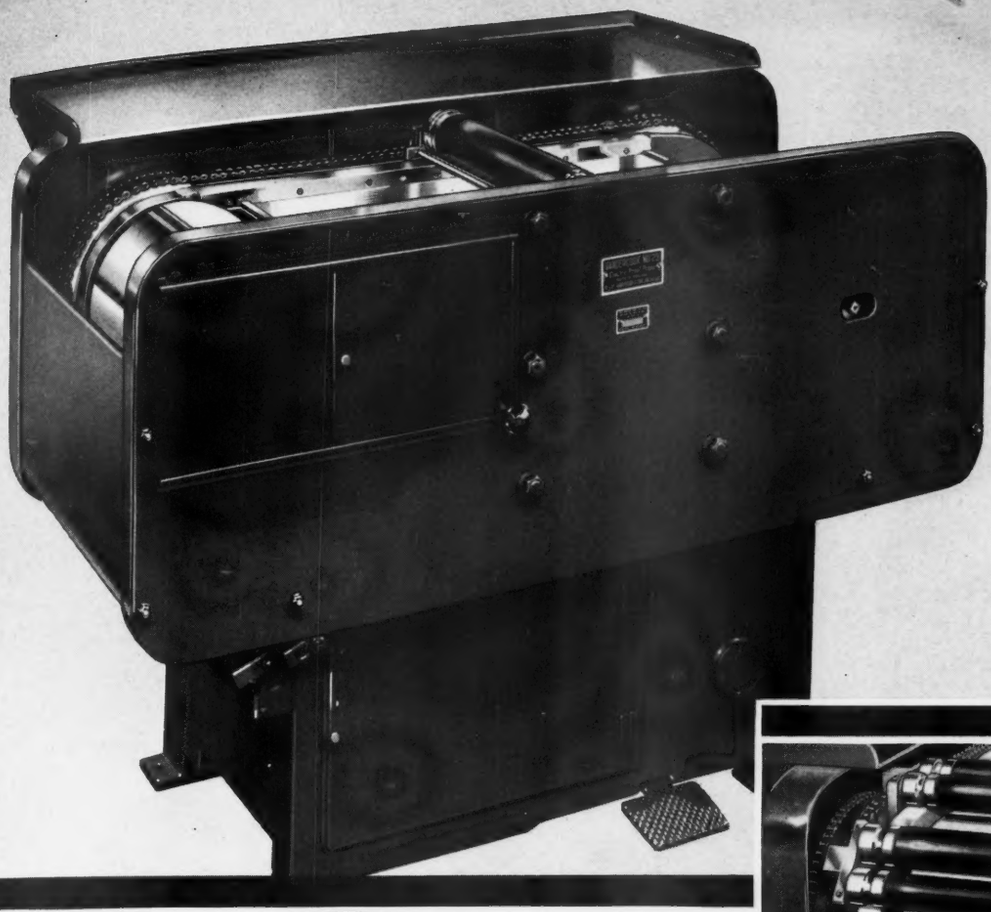
Consult This Index

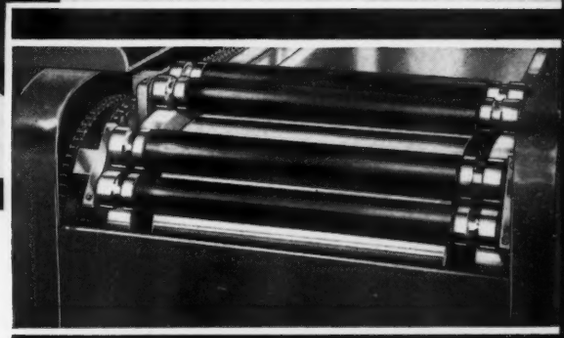
Advertisers

For September, 1937

•

	Page
American Publishers Supply	56-60
Angle Steel Stool Company	64
Atlantic Zinc Works, Inc.	54
Booth, E. A. Rubber Company	51
Bridgeport Engravers' Supply Company	65
Burgess Cellulose Company *Agency:* Fred A. Robbins, Inc., Chicago, Ill.	53
Certified Dry Mat Corporation *Agency:* The H. P. Boynton Advertising Agency, Cleveland, O.	43
Challenge Machinery Company *Agency:* Simmonds & Simmonds, Inc., Chicago, Ill.	60
Cline Electric Mfg. Company *Agency:* Simmonds & Simmonds, Inc., Chicago, Ill.	Inside Front Cover
Cottrell, C. B. & Sons Company *Agency:* Fred Glen Small, Inc., New York, N. Y.	31
Coyne & Paddock, Inc.	63
Cushman Electric Company	58
Dayton Rubber Mfg. Co., The	47
Duplex Printing Press Company	11
duPont, E. I., deNemours & Company, Inc.	13
Eastern Newspaper Supply Company	65
Edes Manufacturing Company, The *Agency:* The Callaway Associates, Inc., Boston, Mass.	55
FitzPatrick Felt Manufacturing Company	57
Flexideal Dry Mat Company *Agency:* Fred Glen Small, Inc., New York, N. Y.	57
General Electric Company	38-39
General Electric Vapor Lamp Company Agency: G. M. Basford Company, New York, N. Y.	6
Goss Printing Press Company, The *Agency:* Simmonds & Simmonds, Inc., Chicago, Ill.	7
Hammond Machinery Builders, Inc.	27
Harris-Seybold-Potter Company *Agency:* Baker and Baker & Associates, Inc., Cleveland, O.	33
Hoe, R. & Company, Inc. *Agency:* G. M. Basford Company, New York, N. Y.	8
Illinois Testing Laboratories, Inc.	65
Imperial Type Metal Company	48
Intertype Corporation *Agency:* Fred Glen Small, Inc., New York, N. Y.	Outside Back Cover
Kimble Electric Company *Agency:* Kirkgasser-Drew Advertising Agency, Chicago, Ill.	61
Lake Erie Stereotype Equipment Corporation	35
Lanston Monotype Machine Company	10
Leiman Brothers, Inc.	64
Linograph Corporation	53
Linotype Parts Company	52
Ludlow Typograph Company *Agency:* Simmonds & Simmonds, Inc., Chicago, Ill.	5
Matrix Contrast Corporation *Agency:* Fred Glen Small, Inc., New York, N. Y.	14
Megill, The Edw. L. Company	65
Mergenthaler Linotype Company *Agency:* Kenyon & Eckhardt, Inc., New York, N. Y.	23
Milwaukee Saw Trimmer Corporation	59
Montgomery & Bacon	56
Morley Button Manufacturing Company *Agency:* Chambers & Wiswell, Inc., Boston, Mass.	62
Morrill, Geo. H. Company *Agency:* Rose-Martin, Inc., New York, N. Y.	51
New England Newspaper Supply Company	50
Niles & Nelson, Inc. (Goodrich, The B. F., Rubber Company) *Agency:* Griswold-Eshleman Company, Cleveland, Ohio	64
Publishers Equipment, Inc.	62
Reid Brothers Company, The	65
Reid, William and Company	65
Richards, J. A. Company	63
Riegel Paper Corporation *Agency:* William H. Hodgins, New York, N. Y.	59
Rolled Plate Metal Company	54
Rouse, H. B. & Company *Agency:* Clifton Kirkpatrick, Chicago, Ill.	55
Sandblom Steel Chase Company	61
Scott, Walter & Company *Agency:* R. F. R. Huntsman, Plainfield, N. J.	29
Sinclair & Valentine Company	58
SKF Industries, Inc.	45
Stahl Newspaper Supply Co., Inc.	3-41
Timken Roller Bearing Company, The	36
Tingue-Brown & Company	64
Vandercook & Sons, Inc. *Agency:* Clifton Kirkpatrick, Chicago, Ill.	Inside Back Cover
Vulcan Proofing Company *Agency:* Fred Glen Small, Inc., New York, N. Y.	49
Webendorfer-Wills Company, Inc.	12
Wood Flong Corporation *Agency:* Metropolitan Advertising Company, New York, N. Y.	46
Wood Newspaper Machinery Corporation *Agency:* Fred Glen Small, Inc., New York, N. Y.	25





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...with 40 GOOD PROOFS A MINUTE

For years newspapers have saved time with high speed Vandercook Electric Proof Presses in their composing rooms.

NOW commercial printing plants can have this same saving—and consequent profit—with the No. 23 Vandercook Electric Proof Press.

Good proofs of catalogs, books, circulars, advertisements, and magazine pages may be printed on the No. 23 Vandercook at the rate of 40 a minute. It will take a sheet 15" x 30".

The No. 22 Vandercook Electric Proof Press, which takes a sheet 10"x28", proves smaller forms and type in galleys even faster than the No. 23.

Commercial printing and newspaper production executives not familiar with the printing qualities of the No. 23 and the No. 22 Vandercooks should write for complete information. Your request does not obligate you in any way.

Accuracy of construction and special Vandercook features insure good proving qualities suitable for commercial printing proofs.

Motor driven drum with rubber vibrator, thoroughly distributes ink on the four Vandercook rubber form rollers.

Impression cylinder is of three density vulcanized rubber which permits good proving of forms in galleys that vary as much as .015" in height.

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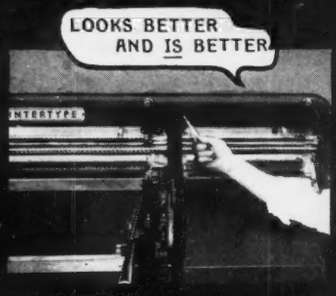
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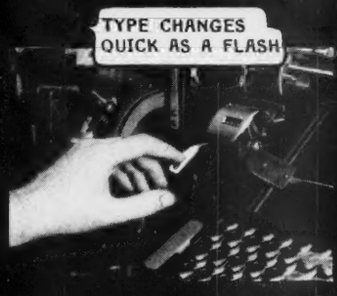
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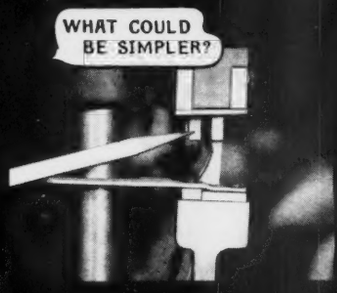
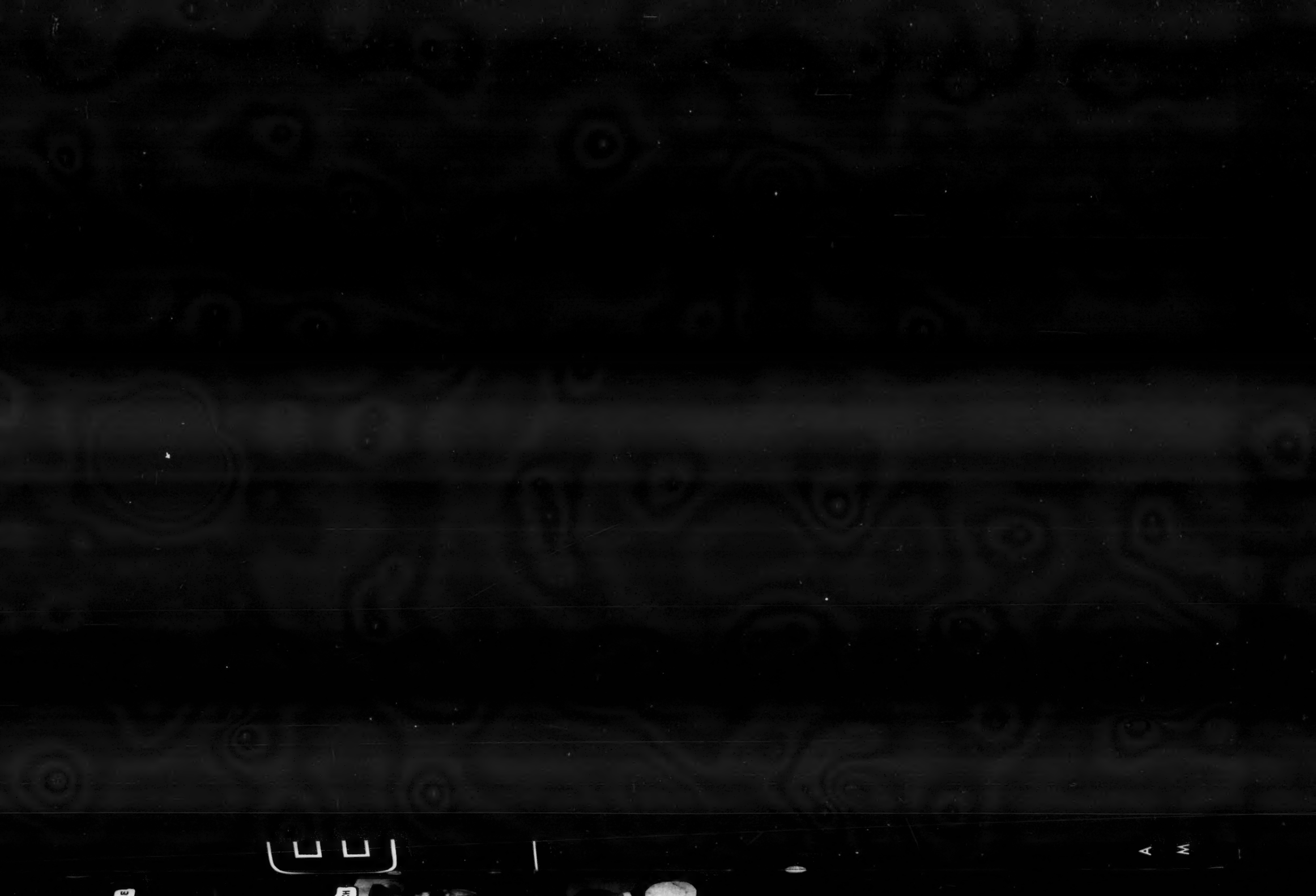
QUICK AS A FLASH

YOU CAN SEE
WHICH IS WHICH
UPPER

NEW LEVER NEAR
SIDE KEYBOARD

TEXT OR DISPLAY
—INSTANTLY


WHAT COULD
BE SIMPLER?

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